TEXTILE WORLD

A McGraw-Hill Publication NOVEMBER • 1951

ARTICLES IN THIS ISSUE DISCUSS:

Annual
Mill Checkup Number
Start on page 109

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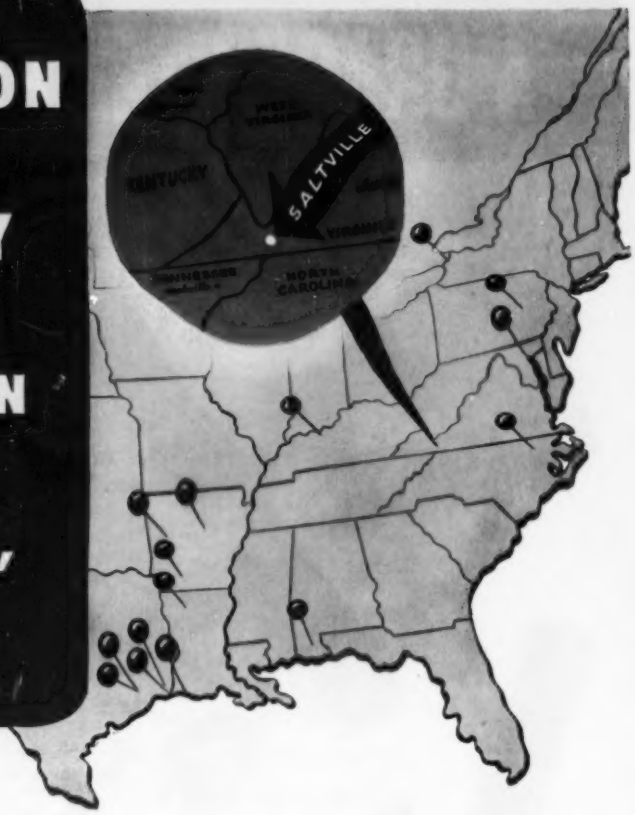

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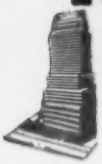

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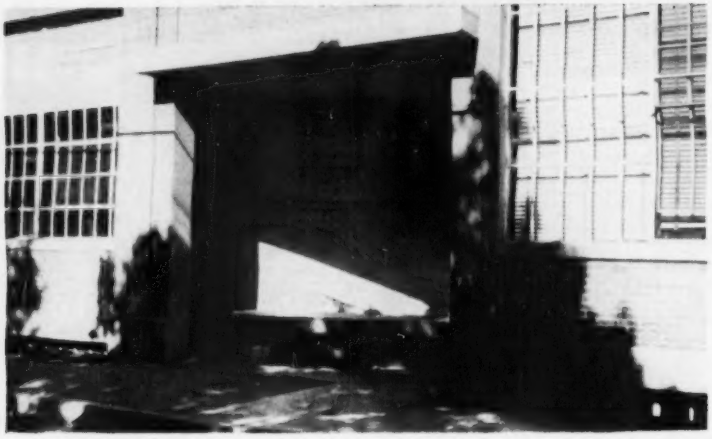

The Operation Was Successful—But the Patient Died

Mount Hope Finishing Co., No. Dighton, Mass., one of the top-flight textile-finishing plants in the country, has boarded up its doors. After fifty years of successful operation, this fine company went down in an unsuccessful attempt to negotiate with its newly formed union.

At the moment, the Mount Hope picture is not clear, but a few salient facts can be stated. First, the company will never operate again; the former major owners have retired from the operation. Second, hundreds of workers have no jobs, and No. Dighton is as good as dead. Third, the TWUA (CIO), under the leadership of regional director Edward F. Doolan, has an abortive attempt at unionization on its record.

We shall make no attempt here to give a cause for the débâcle; it is certain that serious fault can be found with everyone concerned. However, it seems tragic that one of the agencies concerned can survey the failure and facetiously say "we were within our rights."

Doubtless every agency concerned could say that it was within its rights. As far as the letter of the law is concerned, perhaps they were. Nevertheless, Mount Hope is dead. Since Edward F. Doolan was the author, in this case, of the statement, "we were within our rights," it is fitting that Mr. Doolan take another look at his rights and try to justify his success [?] at Mount Hope in the light of the human misery he has contributed to. Certainly his operation was successful, but the patient died.

To be as kind as possible, we can say only that Mr. Doolan (and TWUA) did not correctly gauge his prospects for success at Mount Hope and, once committed to a strike, did not execute his campaign with true knowledge of how far the company could be pushed. In this case, it can be said categorically that Mr. Doolan was an exceedingly poor general.

It seems to us that the muddle at No. Dighton should be a powerful lesson to mills, unions, workers, communities, and states. Massachusetts has lost another good plant. No. Dighton may well become a ghost town. And workers, the union, and stockholders have all lost. Whatever else may be said, it is evident that standing on legal rights is not enough when strained human relations are concerned. Some—and perhaps many—in No. Dighton seem to have overlooked the fact that moral rights are as important as legal rights when people are involved. However legal the means may be, it is surely an immoral act to force self-interest to the point that hundreds of people—old and young dependents, as well as workers—are hurt.

The lesson for mills is not simply to consider unions suspect. It will do mills and mill men far more good to consider themselves suspect (as Mount Hope now does) in their relations with workers and communities. In any dispute where production for the mill and earnings for the workers are concerned, there is a strong moral obligation on both sides for satisfactory settlement. Any mill man from second hand up who cannot fulfill that moral obligation should consider himself as poor a general as Mr. Doolan was at Mount Hope, and persistence in this moral blindness should receive drastic reckoning.

A. M. Thomas

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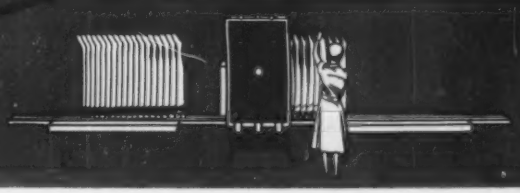

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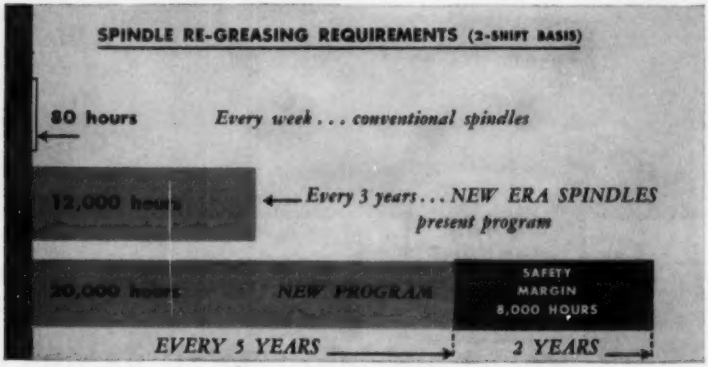
New Departure engineers recently reported on a test made on **NEW ERA SPINDLES** that had been running for **seven years** in Chicopee Mills, Chicopee Falls, Mass., at 10,000 rpm, 16 hours per day, five days per week:

> Even after seven years of continuous service (on two shifts) without re-lubrication, a 100% noise test showed that 283 out of 284 bearings were in excellent condition.
>
> There is still enough grease remaining for further service without lubrication.
>
> It would appear that extending the re-greasing period to five years would be a safe procedure.

On the strength of this test and others still in progress, we expect soon to announce the extending of our former 3-year re-greasing recommendation to a 5-year re-greasing program . . . with a factor of safety of **two years beyond that!**



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Permit Exact Speed Control for Increased Production • Better Quality Control

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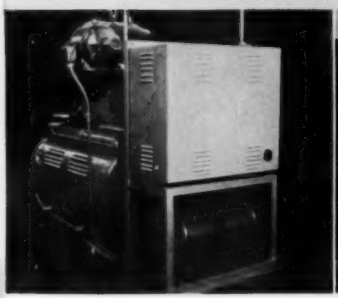
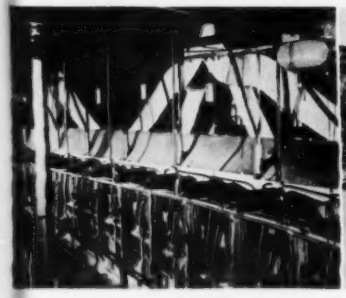
that demonstrate the benefits which you can get from Century Selective Speed Drives on either new equipment or your present set-up.



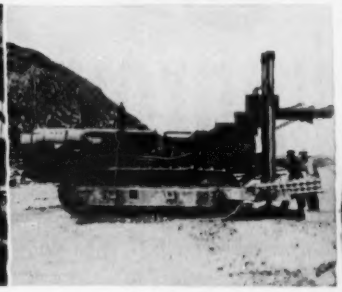
Production increased, machining quality was improved, accuracy is held closer and set-up time is reduced as a result of achieving optimum peripheral cutting speeds on this boring mill.

Costs are cut and scrap is reduced because maximum speeds are easily controlled for different classes of work done on this printing press. Accurate control maintains exact register of multiple copy forms.

Better quality control is maintained over production of latex threads because of the wide selection of speeds plus smooth acceleration and deceleration. Extreme flexibility permits fast change-over when a new gauge, or size, of rubber thread is to be produced. Instant stopping is also an important protective feature.



Uncoilers and coilers with pinch rolls and looping device, require a wide range of inter-related automatic sensitive speed changes. As the coils of material unwind from one spool and wind on another spool, the diameters change yet the speed through the electrolytic process must be at a constant rate.



Operating speeds are instantly controlled on this earth auger drill rig. Permits operator to change speeds according to the type of earth being drilled. Drilling is done to depths of 100 feet in strip mining.

For more details on Century Selective Speed Drives, from 1 to 150 horsepower, call the Century office nearest you. Your local Century representative can also furnish information on the complete line of Century motors, from ½ to 250 horsepower.

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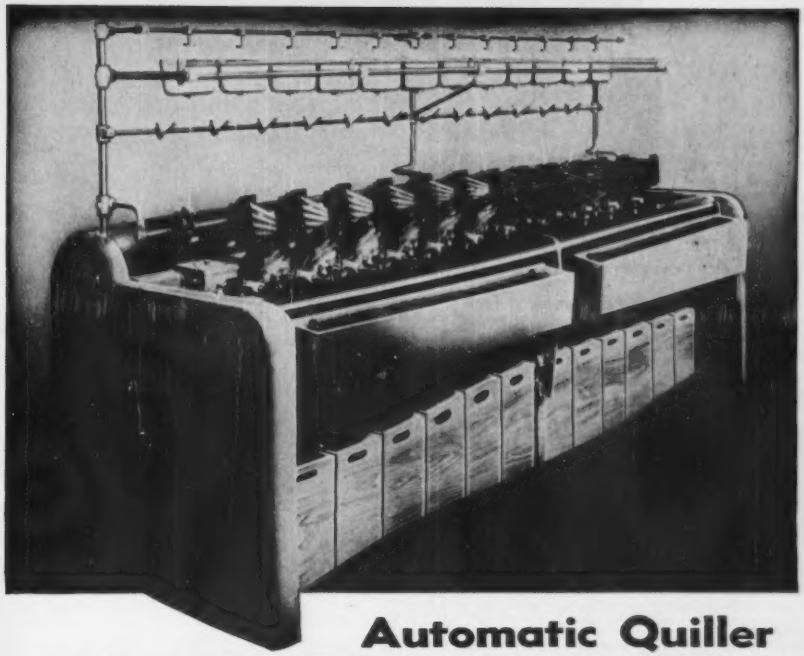

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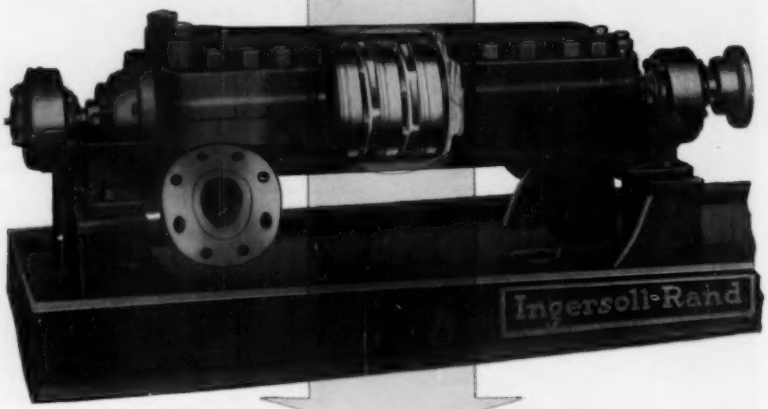
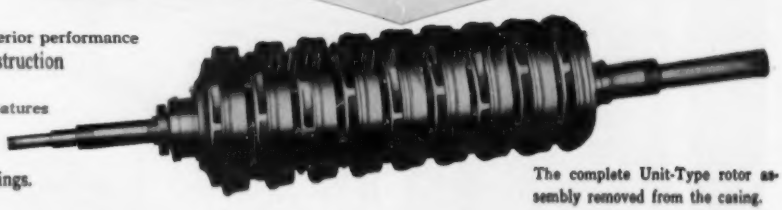


A three-inch, nine-stage HMTA pump, with section of the casing cut away to show the rotor assembly installed.

● When it comes to superior performance and economy, it's the construction of a pump that counts. That's why the modern features of the Ingersoll-Rand Class HMTA pump mean so much to you in terms of long-range savings.



The complete Unit-Type rotor assembly removed from the casing.

SIMPLE, UNIT-TYPE ROTOR ASSEMBLY. Impellers, renewable wearing rings and stationary channel rings, containing the multiple volute fluid passages, make up the compact rotor assembly. Interstage sealing rings, compressed between the casing and channel rings, give a positive, metal-to-metal seal between successive stages. All rotor assembly elements are perfectly matched and self-aligning.

HIGH SUSTAINED EFFICIENCY. Multiple volute design, in-line staging and positive, interstage sealing contribute to the high efficiency of these units. And practical running clearances—proportioned for minimum wear—sustain this efficiency over years of service.

RUGGED CONSTRUCTION. The high-strength, symmetrical casing, is free from crossovers or cast volute passages. Complete radial and axial balance assures trouble-free operation over the complete range of pressures and capacities.

COMPACT, ACCESSIBLE DESIGN. The entire rotor assembly can be removed from or installed as a unit in the horizontally-split, smooth bore casing—without disturbing the piping. And the balancing drum, which is the only high pressure breakdown in the pump, can be inspected without opening the casing.

HMTA

for pressures up to 1400 psi

Ingersoll-Rand Class HMTA pumps are available in capacities to 1600 gpm and pressures to approximately 1400 psi. For complete information on these *distinctively new* multi-stage pumps, write for your copy of Catalog 7233. Or ask your nearest Ingersoll-Rand branch office to give you the complete HMTA story.

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Cameron Pump Division 590-10
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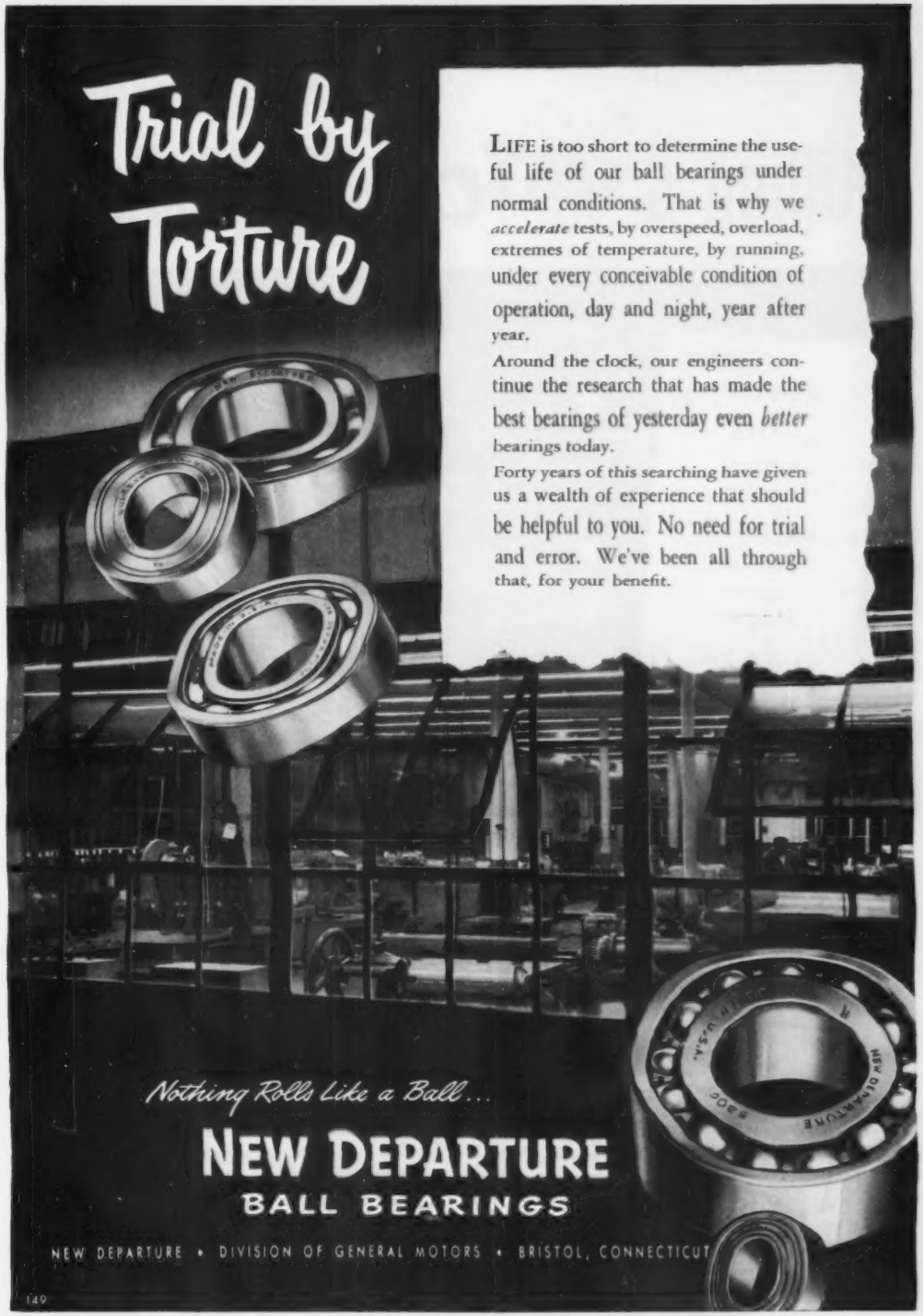
LIFE is too short to determine the useful life of our ball bearings under normal conditions. That is why we *accelerate* tests, by overspeed, overload, extremes of temperature, by running, under every conceivable condition of operation, day and night, year after year.

Around the clock, our engineers continue the research that has made the best bearings of yesterday even *better* bearings today.

Forty years of this searching have given us a wealth of experience that should be helpful to you. No need for trial and error. We've been all through that, for your benefit.



Nothing Rolls Like a Ball...

NEW DEPARTURE
BALL BEARINGS

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149

Killing STATIC is not enough

If you can't say "YES" to these questions, your present anti-static agent is doing only half its job.

★ Does it spread evenly and thoroughly, covering all capillary surfaces of fibers or filaments?

★ Does it establish a uniform coefficient of friction, imparting equallized fiber-to-fiber cohesion?

★ Does it insure absence of gumminess involving aprons and card clothing?

★ Does it give you freedom from yellowing? Rancidity? Corrosive effects on mechanical parts?

★ Does it scour out readily and completely?

★ Is it balanced to do your job?

You can expect these "extras" and others, when you use Nopco "balanced" anti-static chemicals.

Reg. U. S. Pat. Off.

Whether it be wool, worsted, cotton, silk, rayon or nylon, Nopco textile chemicals are enabling manufacturers to profit by economies in processing, and obtain superior products. If you are not already using Nopco Anti-Static Agents, it will pay you to investigate. We'll gladly make recommendations based upon your specific requirements.

NOPCO * "Balanced" Anti-Static Chemicals

NOPCO 1656-R— *A moisture-free worsted oil applicable to all worsted production systems.*

NOPCO 1056-A— *A vital processing aid for Nylon warp and filling yarns.*

NOPCO FUA— *Widely used wool lubricant. Performs like a soap in wet finishing.*

NOPCO 1125-P— *For Nylon and Orlon yarns for lace manufacture. Prevents graphite contamination.*

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Socony-Vacuum can assist you in all of these operations. Our program of Correct Lubrication – based on 83 years' experience working with industry – includes . . .

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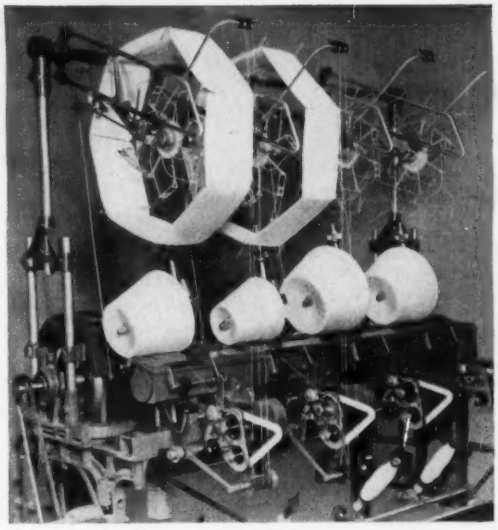

THE SCHWEITER KM CONE WINDER

Designed especially for the knitting industry, the new Schweiter KM Cone Winder consists of a variable number of individual units, each a self-contained winder, individually driven — each waxing and winding in the same operation from either bobbins or skeins. When threads become entangled in the skein, a new tension compensation device automatically stops the unit before thread breaks occur and eliminates stretched yarn. Speed changes can be effected quickly for efficient winding from all types of yarn packages, and pressure against the cone may be adjusted according to the delicacy of the yarn being wound. Here's the precision cone winder you've been looking for . . . the formula for perfect cone production at low operating cost.

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For Spring...

SANDOZ FORECASTS

Benedictine

a luscious golden spice

Spirited liqueur shades—yards and yards of skirts and stoles—make fashion news for spring. Particularly delightful is *Benedictine*, a rich, golden spicy shade named after the famous 16th Century French liqueur. To produce *Benedictine* in wool fabrics Sandoz recommends Alizarine Light Brown BL which is practically identical in its self shade. It possesses exceptional fastness to light along with good fastness to fulling and carbonizing. It may be dyed with or without chrome with equally good results, and has excellent level dyeing properties from a neutral bath. Alizarine Light Brown BL is also recommended for dyeing tans, taupes and camel shades where top light fastness is required such as other interesting liqueur tones which blend so perfectly with *Benedictine*—fashion selections for spring of The Textile Color Card Association. For forecast colors as well as perennial favorites... both natural and synthetic fibres...select from the Sandoz line of chrome, acid, direct dyes and auxiliary chemicals.

For light fastness in rayons and cottons, too

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Sandoz links ahead with textiles

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For extreme light fastness
for greys, sands, taupes

PYRAZOL Fast Rubine BLN

Pyrazol Fast Rubine BLN is an excellent red element for greys, sands, and taupes due to its extreme light fastness with or without urea formaldehyde resin. Combined with Pyrazol Fast Blue RUL or FGL and Pyrazol Fast Orange 4G it gives exceedingly good light fastness at moderate costs. Pyrazol Fast Rubine BLN is ideal for rayons and cottons for both men's and women's suitings, sport shirts, slacks.

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SANDOZ *thinks ahead with textile*

Rieter Winterthur

Established 1795

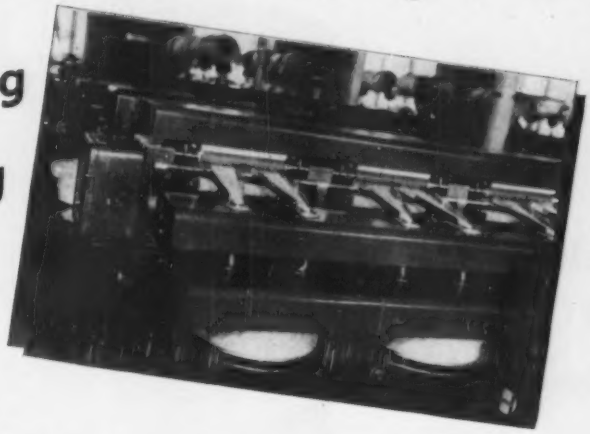
Rieter "Twin-Sliver" Drawing Frame

No tangling

No binding

EVERY FIBRE STAYS

PARALLEL



when feeding the subsequent Fly Frames with Slivers from this Drawing Frame. A rake divides the 8 sliver feed into two groups, each comprising four slivers. The two webs slide over their own guide plates to two coiler-wheels which lay them separately into one can.

The can rotation is reversed at every 180° and forms two entirely separate piles of slivers which cannot interfere with one another when being taken out. An advantage of this method is that no excessively high drafts occur in the following stages, resulting in better yarn quality and simpler drafting arrangements.

Between Bale and Bobbin

In our book, engineering is the basis of sound salesmanship. We frankly are salesmen, salesmen of the right machine for the right job. When you purchase cotton, woolen, worsted or rayon machinery from Atkinson, Haserick & Co., you are investing in a product based on world-wide engineering experience and applied to your particular manufacturing requirements.

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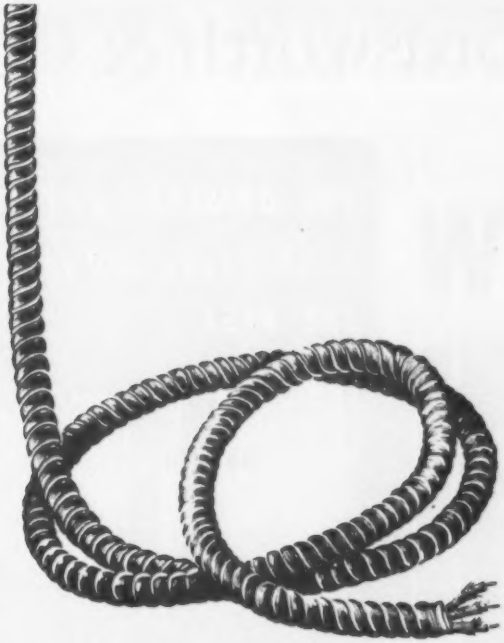
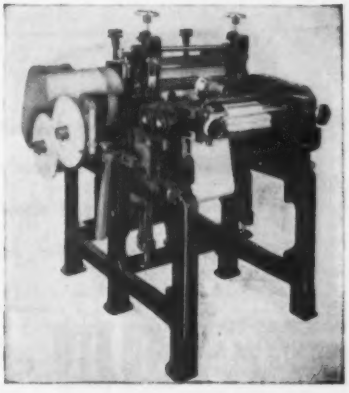


ALL YOU NEED TO PUT YOUR NEW HOLDSWORTH BRADFORD GILL BOX *into action*

Your HOLDSWORTH BRADFORD GILL BOX has been factory-tested. Just connect the power and you will be in *production*. The screws are *pre-timed* and of patented Holdsworth design as are the fallers and cams. This head assembly is so beautifully machined that you can confidently expect years of trouble-free service. Since 1913, Holdsworth has been making gill boxes and we can assure you this Bradford Box meets our standards — *high productivity* — *long service*.



Made in the following models: PREPARER, FINISHER, BACKWASH, BLENDER — SINGLE, DOUBLE, TRIPLE OR QUADRUPLE HEADS — SINGLE OR DOUBLE DELIVERY PER HEAD — INDIVIDUAL MOTOR OR REGULAR BELT GROUP DRIVE

SPARE PARTS FOR ALL TYPES OF GILL BOXES AVAILABLE

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The patented Counter Flow- Air Circulating System delivers a cool, evenly dried, lofty wool with low steam consumption. *Aireflow's* streamlining, inside and out, keeps maintenance low and allows for easy accessibility. May we send you more data on drying wool, cotton, flax, rags or any similar materials?

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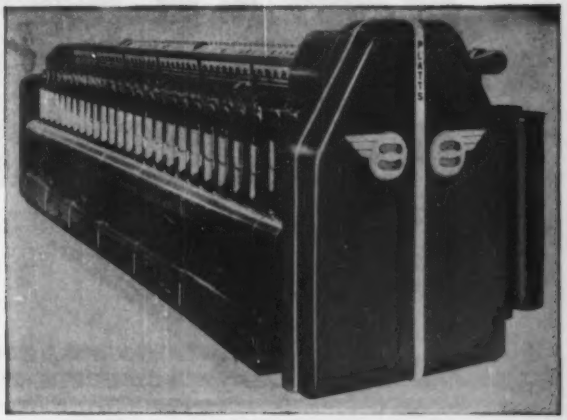
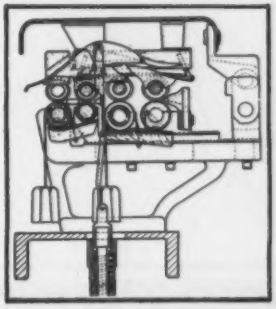
STRONGER ROVING
fewer ends down...



New Patented Hartley Flyer inserts more twist between the top of the flyer and the nip of the front roll. A stronger roving results with a higher production and a lighter work load.

PLATT'S M·S·2 HIGH DRAFT ROVING FRAME

At our Charlotte display rooms, you can see the M.S.2 Frame in operation and examine its well engineered features: The headstock is neat, compact and smooth in appearance, allowing easy access to the gearing and twist change-gears. The silent spindle and bobbin drive has a chain drive to the spindle and bobbin shafts with helical cut gears to each individual spindle and bobbin. Balance of bobbin rails, centralized lubrication, roller gearing, roller weighting, assisting rollers, measuring motion controls, guards and locking motions have all been well designed to be compact and accessible.



The TRIZONA (Trade-Mark) Drafting System employs a progressively controlled drafting which is the answer to the problem of fiber control in each critical drafting field. The patented guide units provide complete control of the fibers. The three drafting zones permit a wide range of drafts. We would be glad to send you a very interesting twelve page booklet with detail illustrations and comparative graphs of roving regularity.

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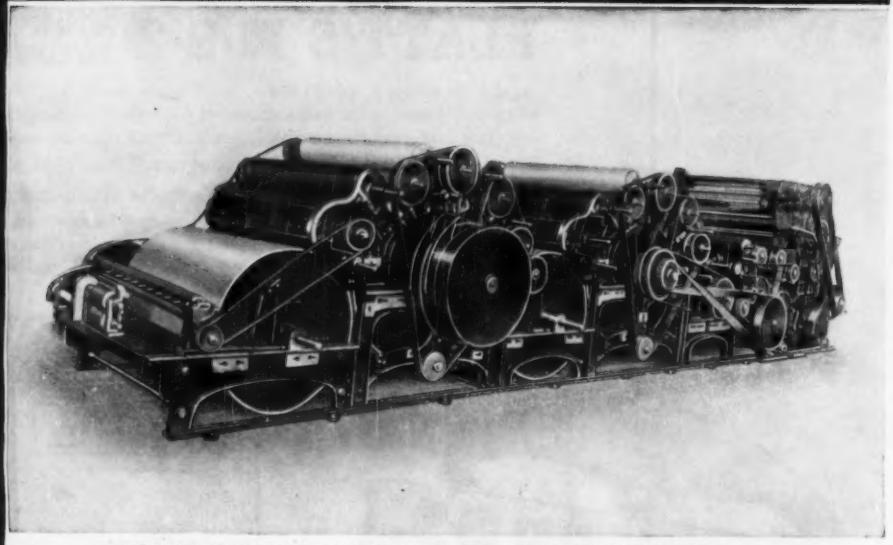

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MACHINERY FOR TEXTILE INDUSTRY
WORSTED SPINNING

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REINFORCED "VERYBEST"
LUG STRAP

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A LOGICAL RESULT OF DECADES
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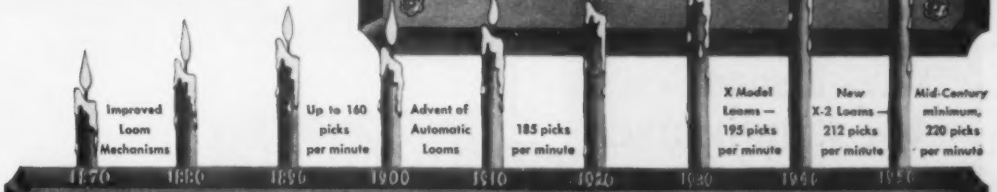
This Jacobs Lug Strap is made of best quality duck, specially reinforced at points of wear and stress, and is fused with special hide glue.

Like all Jacobs products, Reinforced "Verybest" Lug Straps are a result of 82 years' leadership in loom accessory manufacture. Experienced weavers demand them.



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EVERY LOOM SPEED REQUIREMENT

Your Best Motor and

THESE MOTORS NEED NO LUBRICATION

Westinghouse pre-lubricated bearings are paying big dividends to users throughout the textile industry in many ways. Lubrication maintenance is out! Factory sealed, pre-lubricated bearings need no further lubrication. Down time from bearing failures due to over or under greasing is a thing of the past. Pre-lubrication is positive. And there is no chance for dripping grease to mar textile.

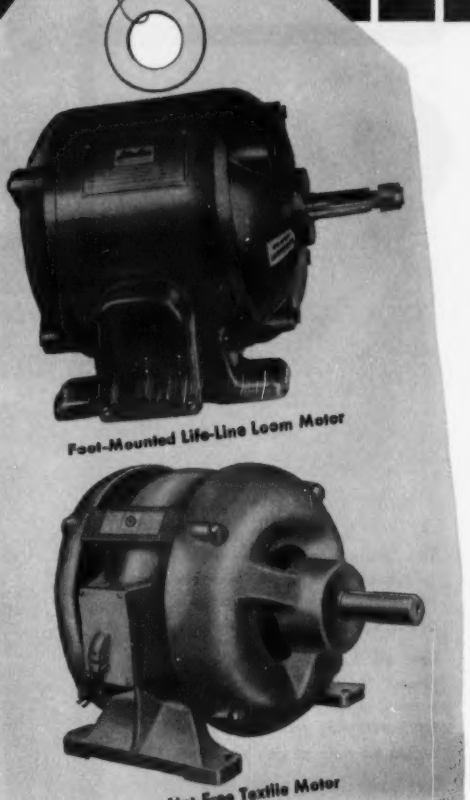
Life-Line Loom Motors

Have balanced design, with an ideal combination of speed-torque characteristic and fly wheel effect, resulting in optimum loom performance. Life-Line steel construction provides maximum strength, minimum dimensions, and a smooth easy-to-clean finish.

Lint-Free Motors

Streamlined, highly polished, stator windings and smooth internal surfaces prevent clogging and offer no foothold for lint to accumulate.

Both these motors are available on immediate delivery. Act now. Call or wire your nearest Westinghouse Electric Corporation Office.



Foot-Mounted Life-Line Loom Motor

Lint-Free Textile Motor

YOU CAN BE SURE...IF IT'S Westinghouse

TEXTILE MOTORS and CONTROLS

Control Buy Today

Loom Motor Starter on Mounting Pedestal

REDUCE FIRE HAZARDS WITH THIS LINT-TIGHT STARTER

Report: "According to a study of weave-room fires by the Associated Factory Mutual Fire Insurance Companies for the period of 1935 to 1945, 38.8 per cent of the electrical fires in weave rooms were caused by loom motor starters."

Approved by Associated Factory Mutual Fire Insurance Companies

Designed in collaboration with the engineering division of the Associated Factory Mutual Fire Insurance Companies and leading textile manufacturers, this starter is aimed specifically at reducing weave-room fire hazards. No chance for combustible lint and dust to reach contacts and spark an explosion. It's the only starter approved by the Associated Factory Mutual Fire Insurance Companies.

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Outstanding Westinghouse features assure positive motor protection and long motor life. Positive bimetallic overload protection . . . quick-make—quick-break toggle mechanism . . . "De-ion®" arc quenchers . . . Bonderized enclosure.

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IMMEDIATE ACTION

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Send complete information on following:

☐ Lint-Free Motor	DB-3800-2
☐ Loom Motor	DB-3800-1 "CSP"
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C&K LOOMS *run on schedule...too!*

With your weaveroom on an "express run" . . . take no chances with your schedule. Keep your C&K Looms up to top efficiency with C&K Parts that are always dependable . . . and readily available. *For competition begins in the weaveroom.* And under today's increasingly competitive conditions, it's important to remember that C&K Parts are made for C&K Looms by the C&K Loom Works . . . and that they're the *natural replacements* to keep your fabric output up to original standards of volume and quality . . . *C&K Quality* . . . which makes it good business for you to say: *This Fabric is Woven in the U.S. A.* . . . on Call-Box Looms built by C&K.

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Keep Your Looms Running Right
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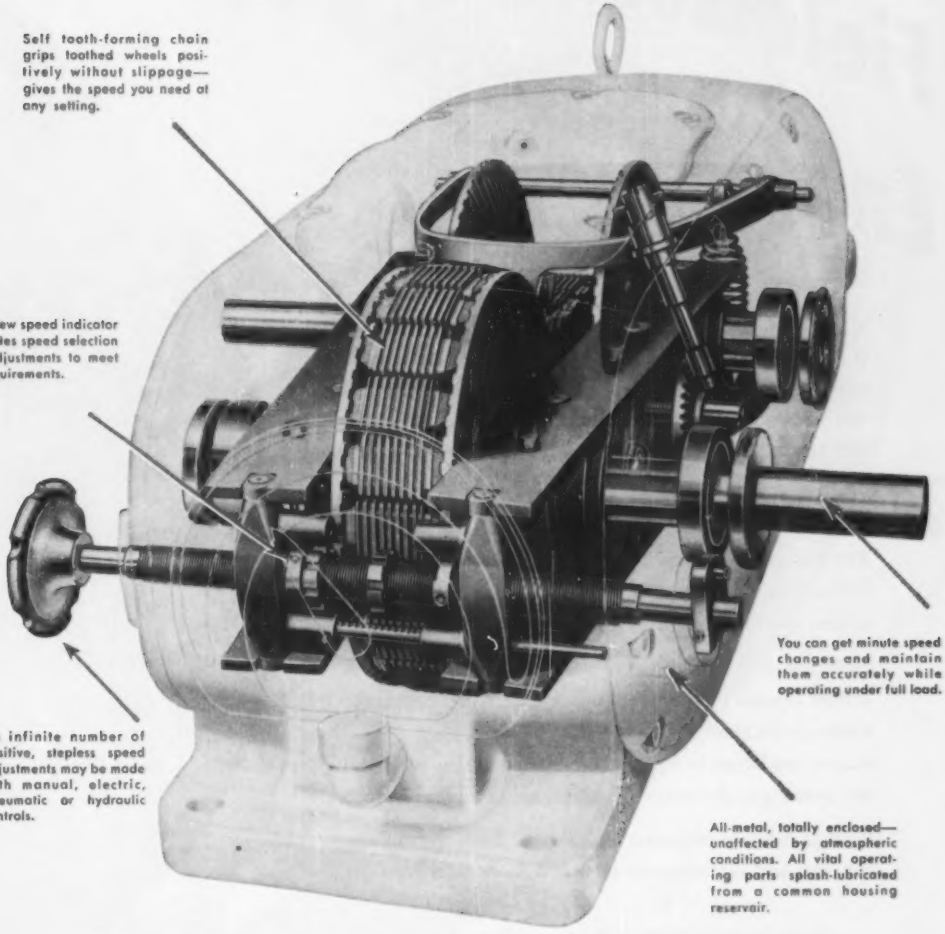
This "Invisible Trademark" Stands Back of the Trademarks of the World's Finest Woven Fabrics

Only the P.I.V. gives you all these advantages in a variable speed drive


Self tooth-forming chain grips toothed wheels positively without slippage—gives the speed you need at any setting.
Easy-view speed indicator facilitates speed selection and adjustments to meet all requirements.
An infinite number of positive, stepless speed adjustments may be made with manual, electric, pneumatic or hydraulic controls.
You can get minute speed changes and maintain them accurately while operating under full load.
All-metal, totally enclosed—unaffected by atmospheric conditions. All vital operating parts splash-lubricated from a common housing reservoir.

ALL INDUSTRY USES P.I.V.

Capitalize on the advantages of the P.I.V.—the variable speed drive that is not dependent on friction for the transmission of power. This compact, all-metal precision unit provides the most accurate infinitely variable means for using machines to maximum capacity for the job at hand. It can be operated manually or automatically while running under full load. The Link-Belt district office nearest you is equipped to supply complete, detailed information on variable speed transmission.

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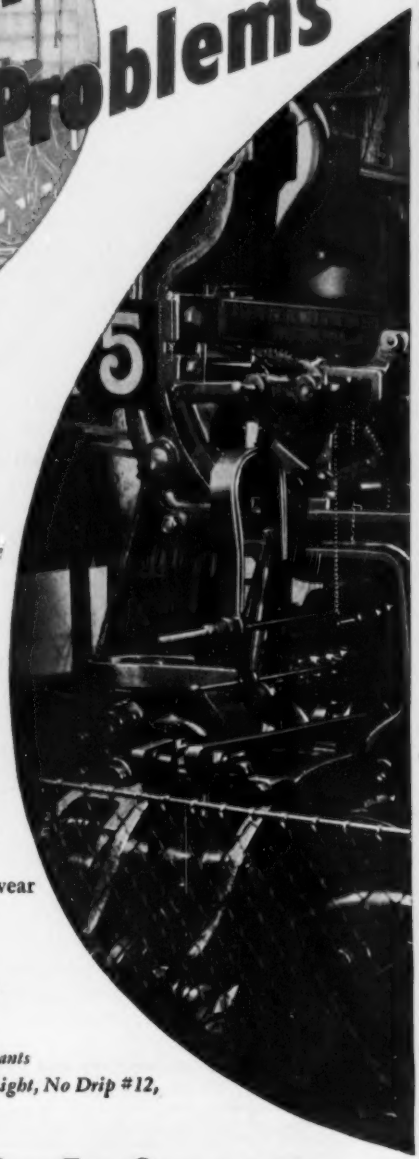
LINK-BELT P.I.V. VARIABLE SPEED DRIVE

Fieldcrest Mill Cuts Wear, Ends Lubrication Problems



In Zion, Ill., Fieldcrest Mills, a Division of Marshall Field & Co., makes fine lace curtains and table cloths in cotton, nylon and orlon. Their lace weaving machines came from Nottingham, England, some as much as 50 years ago. With parts replacements so hard, if not impossible, to get, Fieldcrest felt it vital to get the finest possible lubrication protection.

The mill invited Sinclair engineers to study its problems. Sinclair drew up a complete lubrication program, calling for several specialized Sinclair textile lubricants.

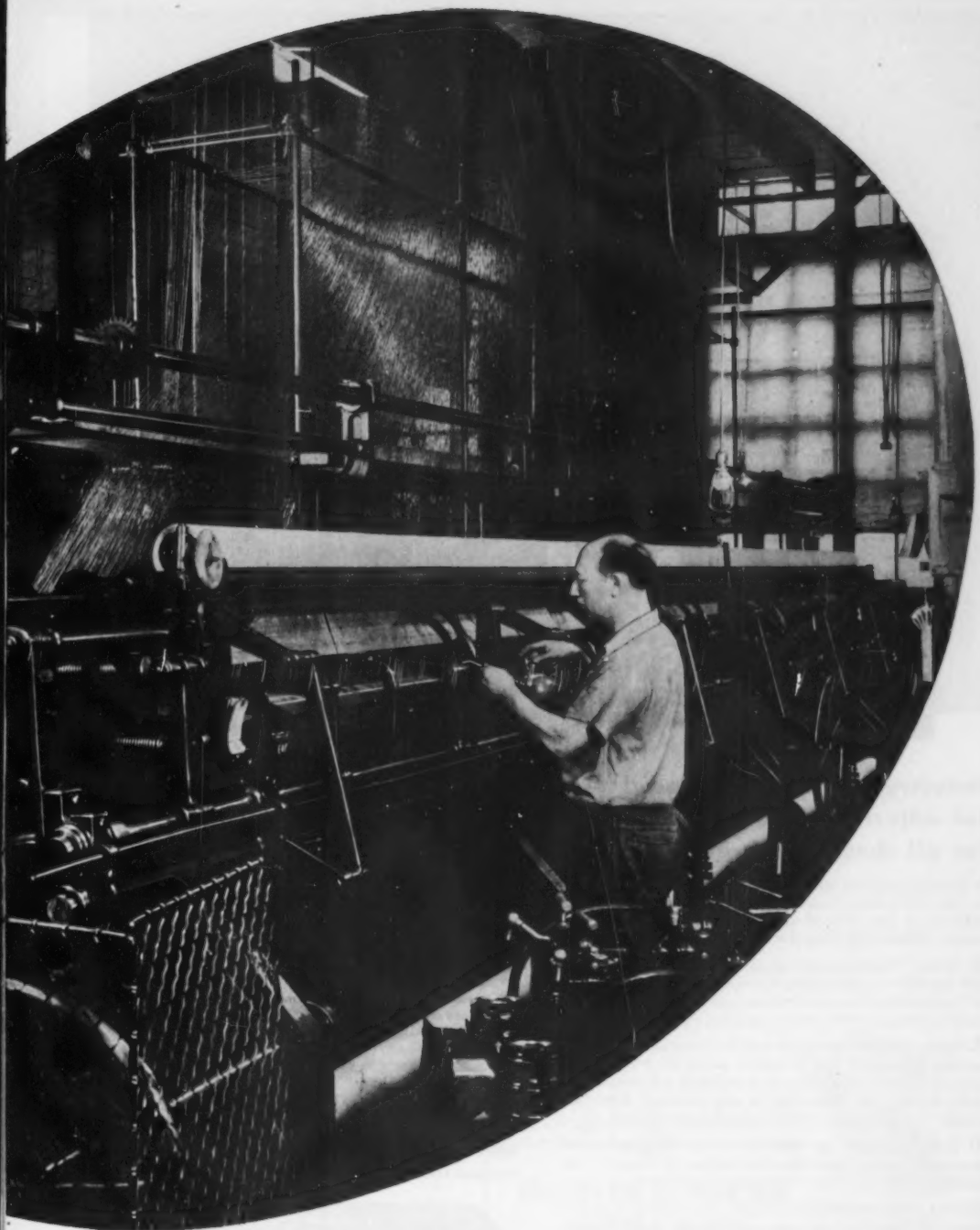
Fieldcrest followed this program to the letter. It now reports the lubrication has materially cut wear on the weaving machines and reduced breakdowns and related headaches in the bleaching and finishing rooms. Hook wear and burning in the sewing machines are no longer a problem.

Perhaps Sinclair engineers and Sinclair lubricants can help cut wear and replacements in *your* mill. Why not investigate?

A lace weaving machine in Fieldcrest Mills, where Sinclair Lubricants are saving wear. Lubricants include Lily White Oil C, Valve Oil Light, No Drip #12, Bearing Grease AF #1, Shamrock® F, Rubilene® Light.

Sinclair Textile Lubricants

FOR LUBRICATION COUNSEL, SEE YOUR NEAREST SINCLAIR REPRESENTATIVE OR WRITE TO SINCLAIR REFINING



save wear, replacements

COMPANY, 600 FIFTH AVENUE, NEW YORK 20, N. Y.

REEVES Variable Speed Transmission

The original, mechanically correct unit for providing complete, stepless speed adjustability.

Industry's most widely used unit for adjusting machine speeds . . . for all these good reasons:

1. Incorporates the REEVES operating principle—proved in 300,000 installations—which assures *accurate, positive* delivery of any desired speed within the entire speed range, without stopping the machine.

2. Makes "changeovers" easier—utilizes the machine's *full* capacity—by providing the *right* speed—with the turn of handwheel or touch of button—for every operation and every operator, under every changing condition.

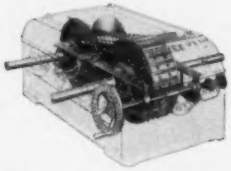
3. Wide choice of vertical and horizontal models—capacities up to 87 hp; in speed ratios of 2:1 to 16:1; manual, electric, hydraulic or completely automatic controls; suitable for mounting in any position. Also "Internals" for mounting within machine framework.

4. Easily installed on your machines. Ruggedly constructed with few moving parts subject to wear . . . requires no special tools or training to maintain.

5. Used on more different kinds of machines in a greater variety of industries than any other single variable speed drive.

Profit from REEVES Speed Control in your plant—*see immediate results.* Send for full details on REEVES Speed Control—ask for catalog No. W68-G.

Operating Principle



REEVES Variable Speed Transmission embodies the proved operating principle of a V-belt driving between two pairs of cone-shaped discs, mounted on parallel shafts and adjustable to form an infinite number of driving and driven diameters. One shaft receives power at constant speed from motor, line shaft, etc. Other shaft delivers power at infinitely variable speeds to driven machine. Each speed setting is held without fluctuation. Operation is practically noiseless.

REEVES PULLEY COMPANY • COLUMBUS, INDIANA

Recognized leader in the specialized field of speed control engineering

accurate • variable
REEVES *Speed Control*

For More Durable Wash-Fast Finishes **RHONITE R-1**

Check These Extra Advantages of RHONITE R-1

- ✓ *Non-volatile—applied and controlled with ease on standard resin-finishing machinery.*
- ✓ *Stable to storage—no refrigeration needed.*
- ✓ *Completely soluble in cold water — simply add and stir.*
- ✓ *Compatible with other commonly used finishes.*

Be wise and thrifty; get full details of unique, new RHONITE R-1 resin.

RHONITE, LYKOPON are trade-marks, Reg. U.S. Pat. Off. and in principal foreign countries.

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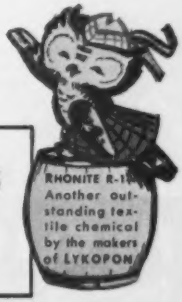

MECHANIZE 4 Scrubbing Operations into 1

with a COMBINATION SCRUBBER-VAC!

Here's a timely answer to the need for conserving manpower and reducing labor costs—*a single cleaning unit that completely mechanizes scrubbing.* A *Combination Scrubber-Vac* applies the cleanser, scrubs, rinses if required, and picks up (damp-dries the floor)—*all in one operation!* Maintenance men like this *four-in-one feature;* also the fact that the machine is *self-propelled* . . . has a *positive* clutch . . . new type of water valve that *assures* uniform flow of water . . . and powerful (quiet) vac for efficient pick-up.

The *Scrubber-Vac* shown at right, *Model 213P,* is designed for heavy duty scrubbing of large-area floors. This machine has a 26-inch brush spread, and cleans up to 8,750 sq. ft. per hour! (Powder dispenser is optional.) *Finnell* makes *Scrubber-Vac Machines* in a full range of sizes—for small, vast, and intermediate operations. From this complete line, you can choose the size that's exactly right for *your* job (no need to *over-buy* or *under-buy*). It's also good to know that you can lease or purchase a *Scrubber-Vac,* and that *there's a Finnell man nearby* to help train your maintenance operators in the proper use of the machine and to make periodic check-ups.

For demonstration, consultation, or literature, phone or write nearest *Finnell Branch* or Finnell System, Inc., 1911 East Street, Elkhart, Indiana. Branch Offices in all principal cities of the United States and Canada.

Conserve Manpower with Completely Mechanized Scrubbing

FINNELL SYSTEM, INC.

Originators of Power Scrubbing and Polishing Machines

FINNELL

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CARBANTHRENE BLUE GREEN FFB
(DOUBLE PASTE)
Excellent all-around fastness suitable for upholstery, drapes and all other launderable articles.
Can be used alone or to produce interesting color effects by shading with yellow. Highly versatile as a printing color on cotton or rayon. Produces very fast turquoise blues on silk.
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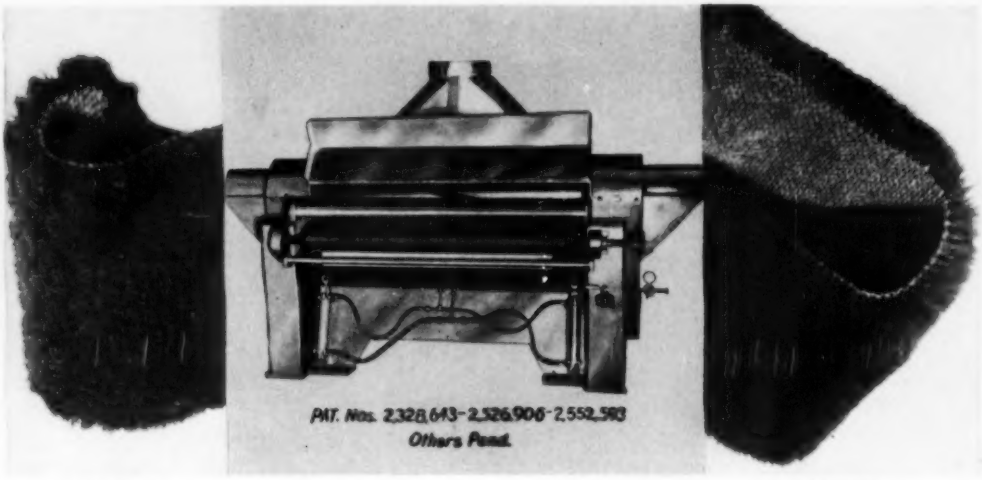

BEFORE **AFTER**

FURTEX ***presents—***

An electrifying machine for finishing High Pile and other pile fabrics of wool, dynel, rayon and other synthetic fibers. (Furtex also manufactures a wetting applicator and shearing machine used in the finishing process.)

Through the use of chemicals with this Furtex machine a lasting fur like appearance with a high lustre is obtained.

FURTEX

—a name well-known in the fur industry as a leading manufacturer of fur machinery now offers the textile industry a machine and a process that will satisfy a popular demand for "imitation furs". Furtex invites your inquiries and guarantees satisfactory results.

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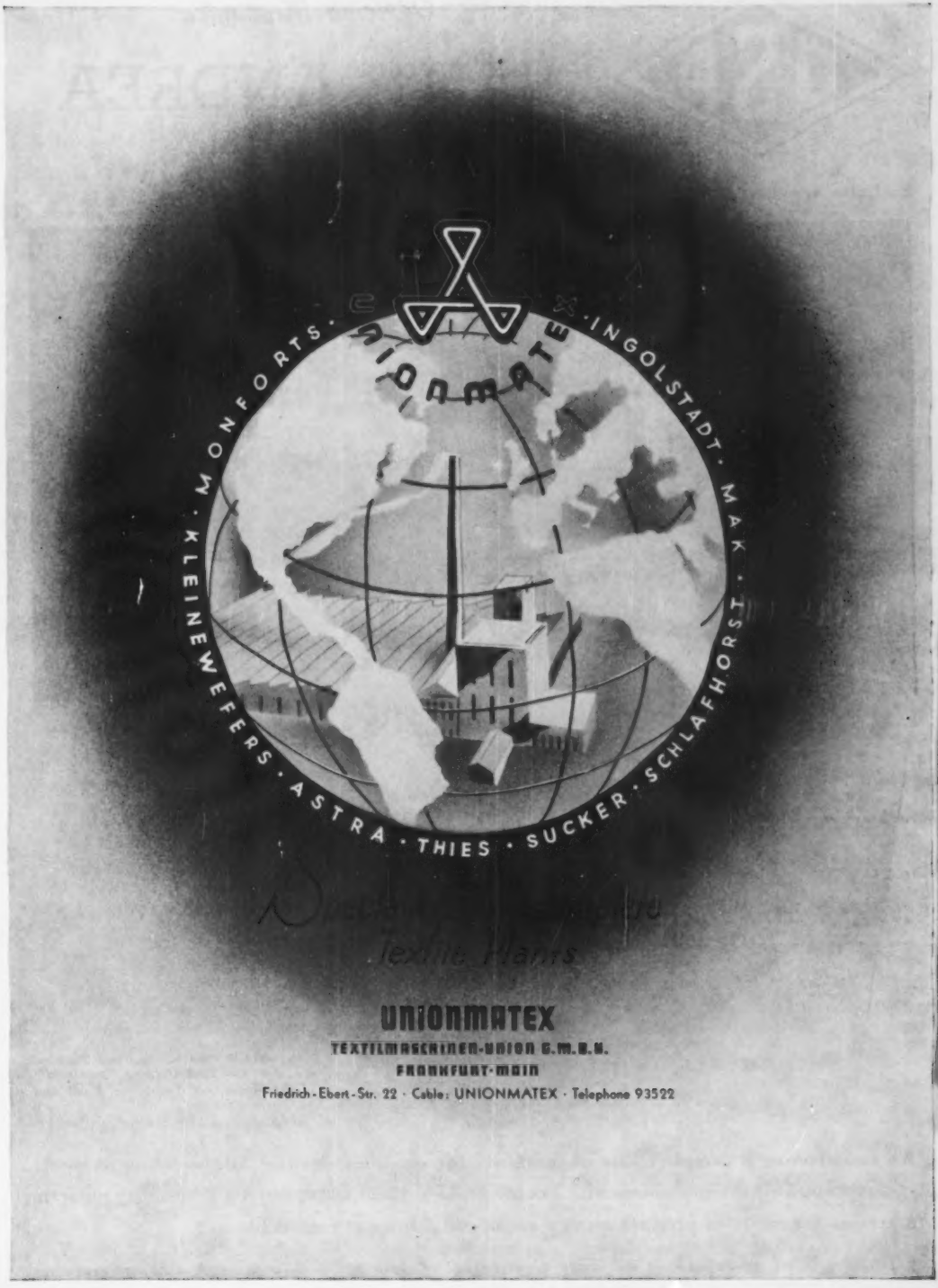

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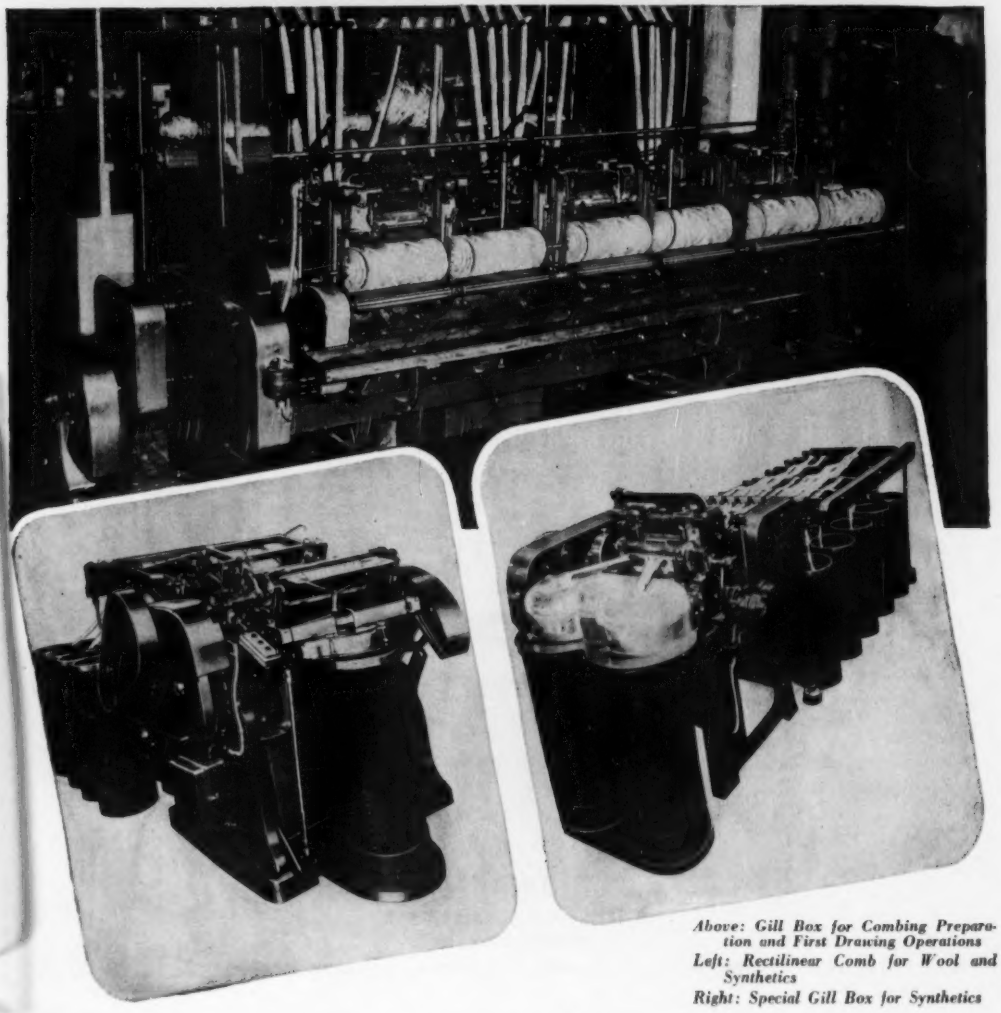
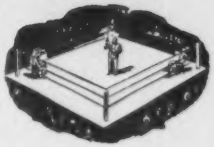


Above: Gill Box for Combing Preparation and First Drawing Operations
Left: Rectilinear Comb for Wool and Synthetics
Right: Special Gill Box for Synthetics

We manufacture a complete line of machines for combing, drawing and spinning of wool, synthetics and blends—machines which combine 25 years of European know-how with modern American ingenuity to produce quality yarns and fabrics at reasonable cost.

- ***Hundreds of installations all over the world***
- ***Prompt service***

Follow-thru with Leather



You get perfect boxing and throwing with

HAIRITAN BOXMASTER LEATHERS

because they give with the punch

and go into a clinch

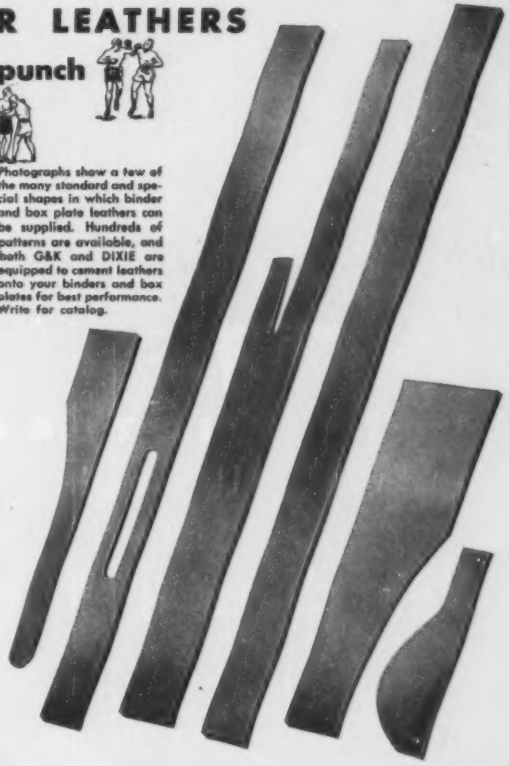
These stop-action photographs tell the story! They were posed after careful study with high speed stroboscopic lights, but since the top plate was removed it was impossible to have the loom in operation.

Notice that the shuttle *strikes* the shoulder of the binder, which then moves in against the shuttle and *brakes* it to a smooth stop at the end of the lay.

The exclusive G&K Hairitan tannage and finish give Boxmaster leathers a deep velvety, highly frictional surface and smooth catch-free edges. No waxes or fillers are needed. Boxmaster leathers do not bleed or catch fine filament rayon.

Boxmaster binder and boxplate leathers are part of the famous G&K Orange Line team of textile leathers that will help you get more and better output from your looms.

Photographs show a few of the many standard and special shapes in which binder and box plate leathers can be supplied. Hundreds of patterns are available, and both G&K and DIXIE are equipped to cement leathers onto your binders and box plates for best performance. Write for catalog.



1. Shuttle entering box strikes "shoulder" of binder, causing it to swing back, freeing shuttle.

2. Shuttle moves further into box.

3. Binder swings in against shuttle; binder leather provides braking action on shuttle.

100 YEARS OF SERVICE TO INDUSTRY

GRATON AND KNIGHT®

DIXIE LEATHER CORPORATION

HAIRITAN® BOXMASTER

Binder and Box Plate Leathers

FAMOUS ORANGE® LINE TEXTILE LEATHERS

GRATON & KNIGHT COMPANY, WORCESTER, MASS. • DIXIE LEATHER CORPORATION, ALBANY, GEORGIA *Affiliate*

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Your Most Logical Source
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Colors

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Textile Colors Division

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For Fast Brilliant Prints

ARIGEN DYES*

The addition of Arigen dyes to the family of Interchem Dyes is still another reason why Interchemical is "your most logical source" for the finest in textile colors.

You will find these stabilized azoic dyes particularly suitable for printing alongside Aridye pigment colors to produce unusual color combinations of brilliant reds and scarlets, dark blues, violets, and browns. They meet all the usual fastness requirements for dresses, handkerchiefs, scarves, draperies and the like.

This new line of Arigen dyes provides you with the finest stabilized azoic dyes for printing cotton, spun rayon and other fabrics. They may be applied in the conventional gum thickeners or in Interchemical's exclusive Aquadye® Emulsion method. Available in both powders and solutions.

Samples of Arigen dyes and complete information on their properties and methods of application . . . as they apply to your individual needs . . . will be gladly furnished on request. Write Interchemical Corp., Textile Colors Division, Hawthorne, N.J.

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You'll Find TUFFER Card Clothing
PERFECTLY UNIFORM

Uniformity in Card Clothing is not easy to obtain . . . because in its manufacture, each machine must do the work of cutting millions of pieces of wire and shaping them into perfectly uniform staples.

Here you see our inspection department where millions of points are examined every working day to maintain Tuffer Quality. Such vigilance brings Tuffer Card Clothing to you with every point in position with uniformity of height, pitch and angle and finished perfectly for immediate use on your cards.

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USE BECCO HYDROGEN PEROXIDE
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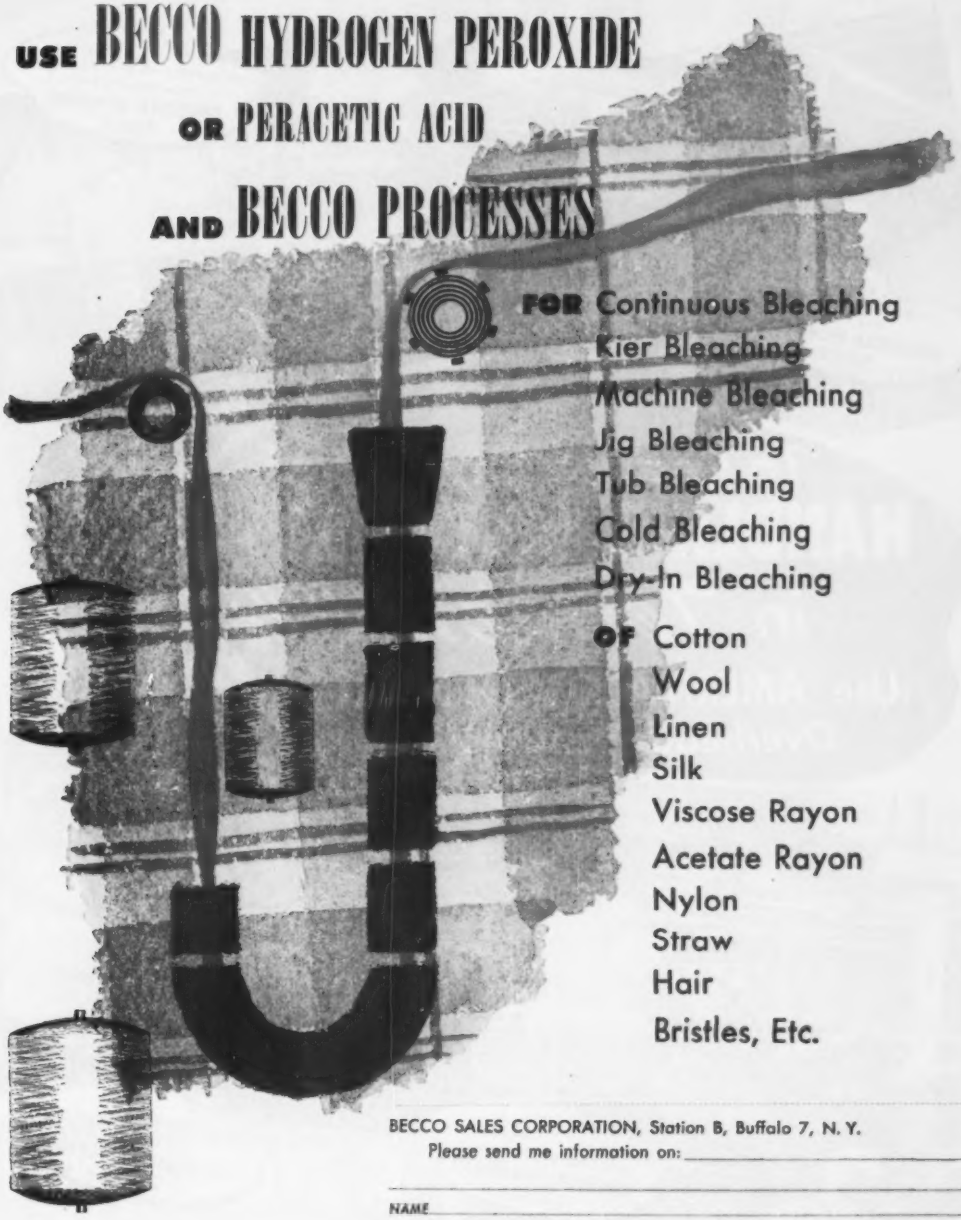

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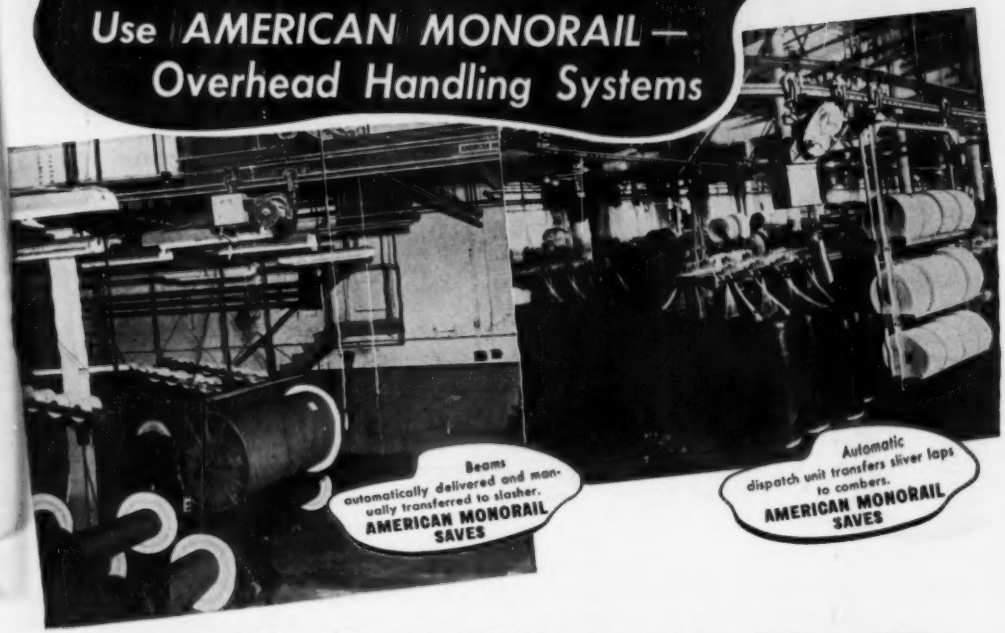
To Reduce the Cost of HANDLING MATERIALS in *Textile Mills*

Use AMERICAN MONORAIL — Overhead Handling Systems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You can save if you take this cost-wise view

Yarn Carriers, too, are Capital Equipment

How do you regard bobbins, shuttles and other yarn carriers? Like many millmen, do you, also, think of them as incidental equipment, too low in cost to warrant much administrative attention?

Then look at a few *annual* expenditures for yarn carriers . . . $80,000 . . . $60,000 . . . $45,000 . . . enough to buy several units of processing machinery.

When you take the proper view of yarn carrier purchases, you'll find they, too, should be classed as capital equipment. And there's a real opportunity for substantial savings if you buy them with equal care to get the most for your money . . . in advanced design, in lasting durability, and in top-flight performance.

It is taking this cost-wise view that has led so many of the nation's best operated mills to standardize on U S Bobbins, Shuttles, and other yarn carriers. They know they are dealing with men who "speak their language" . . . and with a firm whose aptitude is proved by a 93-year record of leadership.

Whether you are equipping a new mill or replacing worn out carriers, talk to a U S sales representative first. You'll find it pays . . . in better yarn and fabric quality, and in lower operating costs.

U S BOBBIN & SHUTTLE CO.

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U S owned timber properties permit complete control of wood stock selection and every step in processing, from forest to finished products. Five manufacturing plants, North and South, provide ample facilities to produce and deliver promptly the cost-saving yarn carriers you need, in any quantity.

Anywhere in textile America, you are near the headquarters of a U S specialist in yarn carrier selection. He'll call at your request.

Brand New

PATENT PENDING

Completely new method of manufacture, at new low price. Various styles.

CLEANDRAFT
Non-lubricating Top Rolls for Back and Middle Lines*

- eliminate all lubricating effort.
- give much cleaner yarn, due to complete freedom from lubricant.
- reduce picking and cleaning.
- simple to install.

Low First Cost — Substantial Savings — INVESTIGATE

*Not for front line use.

CLEANDRAFT Non-lubricating Top Rolls are made for back and middle lines of all standard and long draft cotton Spinning Systems.

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. . . with his invention of the first all pneumatic system of temperature control and gradual acting vapor disc thermostat made an invaluable contribution to the modern science of heating, air conditioning and industrial process control.

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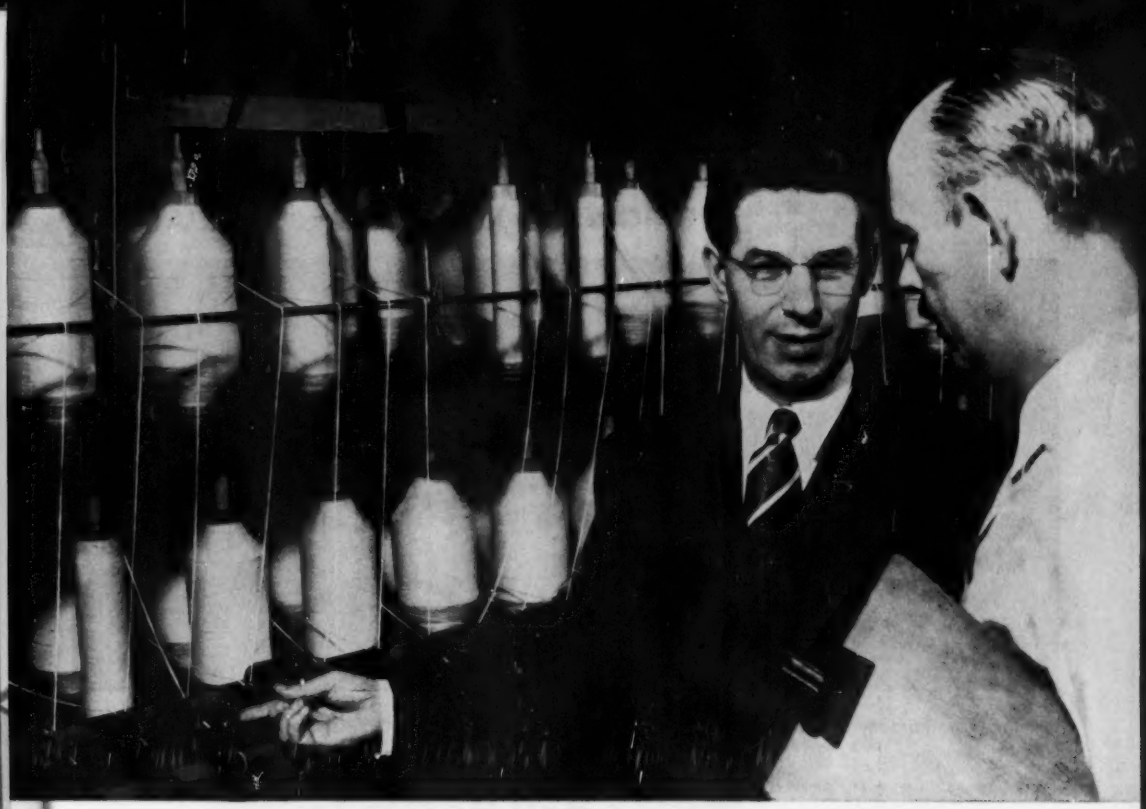
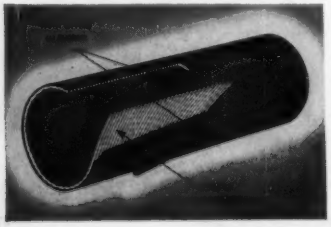


IT TAKES A LONG TIME TO WEAR OUT THESE APRONS

You can't beat Armstrong's Accotex Aprons for long service. Many mill men report Accotex Aprons still running satisfactorily after five or six years, sometimes more.

A Georgia mill, for example, ran a set of NO-700 Accotex Aprons on their Casablanca frames two shifts a day for eight years. At the end of that time, they were still free from cracks and roughness, still running as clean as the day they were put on the frames.



What makes these aprons stand up so well? Simply this: Every Accotex Apron is made of special synthetic rubbers in a patented three-layer construction. Each layer is scientifically designed to do its own special job.

The outer layer is a seamless drafting surface of satin-smooth synthetic rubber of a type that runs clean and resists scuffing. It is specially formulated and treated for life-long smoothness.

The inner layer is another seamless layer of synthetic rubber, designed to resist years of abrasive wear caused by the nose-bar.

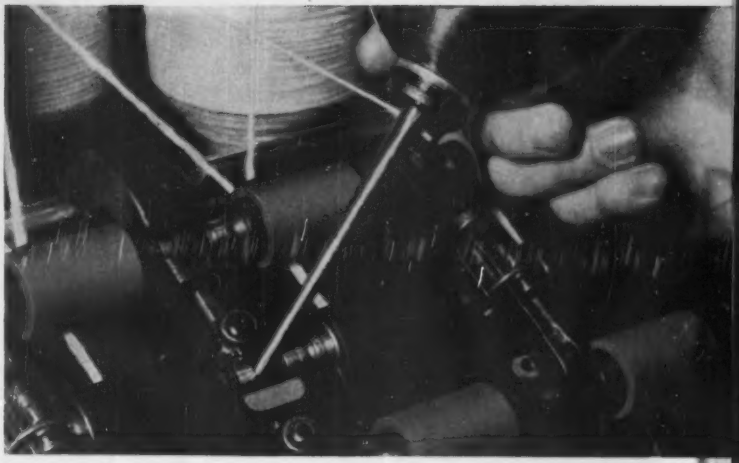
Between these specialized layers is a sturdy cord interliner. It holds the shape of the apron and prevents stretching or curled edges. Vulcanized together, these three layers make a rugged, trouble-free apron.

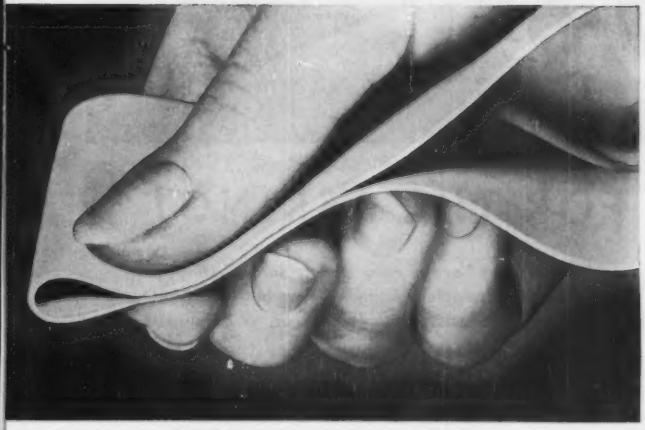
You can get Armstrong's Accotex Aprons for any type of long-draft equipment. For full information, just call your Armstrong representative. He can help you specify the apron best suited to your needs.

Call him today or write Armstrong Cork Company, Textile Department, 8311 Arch Street, Lancaster, Penna. Accotex Aprons available for export.

SATIN FINISH: Rub your fingers across the surface of an Armstrong's Accotex® Apron. You'll discover it feels smooth as satin. Each Accotex Apron is ground to the exact thickness you specify and—by a patented process—given this smooth, scuff-resistant surface.

CLEAN-RUNNING: Because Accotex Aprons don't absorb oil or soften from exposure to dyes and commonly used textile solvents, they have no tendency to pick up lint. They won't sweat under any mill condition. If you want a durable, clean-running apron, you can't beat Armstrong's Accotex Aprons. Try them on a test frame in your own mill.

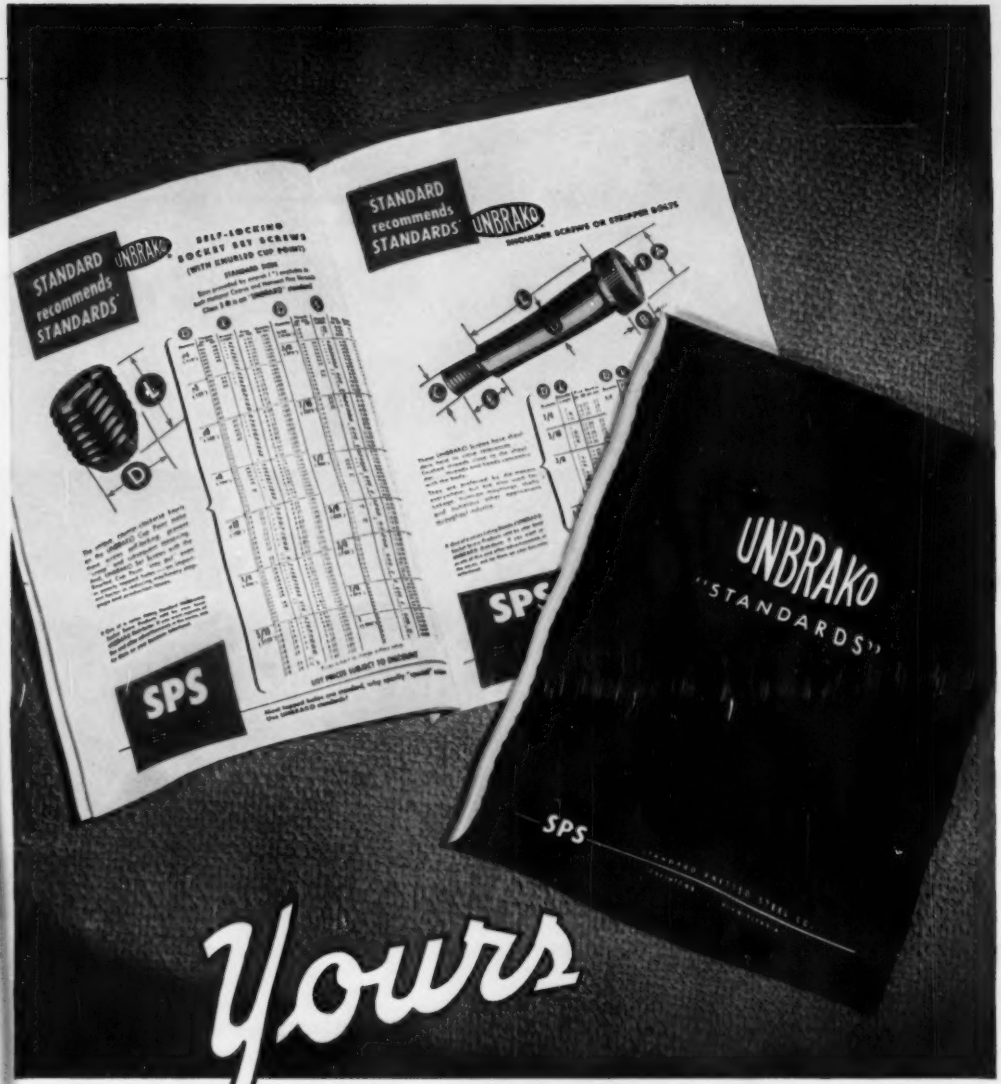




SUPER-FLEXIBLE: Armstrong's NO-750 Accotex Aprons have the extra flexibility and abrasion resistance needed on a single-apron frame. They hug the nose bar without buckling and so insure smooth slip-roll action. If you are considering new single-apron long-draft equipment, be sure to specify Armstrong's Accotex Aprons.

ARMSTRONG'S ACCOTEX APRONS

one of Armstrong's complete line of textile mill supplies



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You've known these familiar trademarks . . .

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NOW LOOK FOR THIS TRADEMARK

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Whether you've been accustomed to doing business in the past with Columbia Chemical Division of Pittsburgh Plate Glass Company, or with Southern Alkali Corporation, you'll continue to find the same competent personnel—in every department—welcoming the opportunity to serve you as Columbia-Southern . . . through strategically located plants and offices.

Production at all plants is being maintained at the highest possible levels in order to help meet the current requirements of industry. And the same district offices will continue to provide facilities that assure the most careful attention to the needs of your business.

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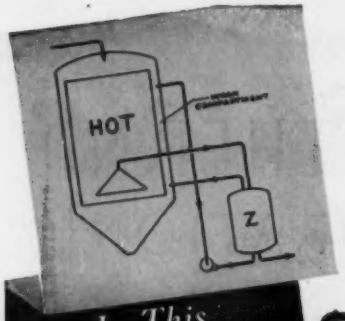
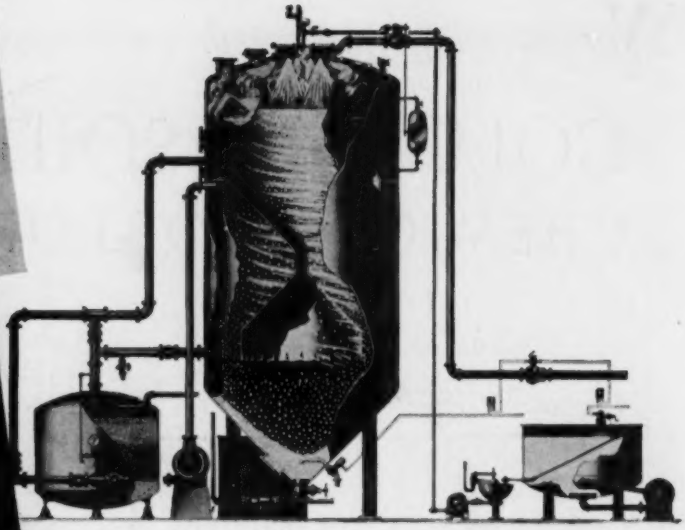


In This
WORTHINGTON
HOT-Z
Deaerating Type Water Conditioning System . . .



Built-In Annular Wash Water Compartment Supplies and Reclaims Backwash Water

Independent of the Softening Process

No other Hot Zeolite System offers you so many advantages as this Worthington Hot-Z System. A quick review of the vital facts will show you why.

As you probably know, Hot Zeolite beds require periodic expansion to minimize packing and friction loss, and to insure efficient contact of each Zeolite particle with its share of dissolved impurities. This need for bed expansion occurs not only during the regeneration routine, but also several times during the period between regeneration routines. That's why it is important for you to use clean, softened water, preferably at normal operating temperature, for the reverse flow or "backwash" operation.

Worthington does it!

The Worthington Standard Hot-Z System with its backwash feature provides a built-in annular wash water compartment that supplies and reclaims backwash water . . independent of the system's softening process. In this compartment, backwash water is cleaned and maintained at normal operating temperature.

This backwash feature pays off particularly in systems employing filters because it *makes filter beds last as long as eight years.*

Other advantages

Worthington Hot Process Systems come equipped with modern, direct contact vent condensers. This means, no more of the scaling trouble that made the old-fashioned shell and tube types such a nuisance.

In addition, Worthington Hot-Z Systems operate on low-priced lime and salt. That's why the average installation saves enough in chemical costs to pay for itself in 3 years.

Get all the facts!

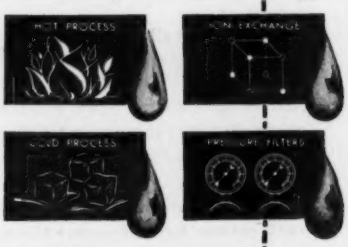
It will pay you to investigate the Worthington Hot-Z System thoroughly. Tell us your conditions of service and get our recommendation in terms of dollars and benefits. You'll find in our Hot-Z System, as in so much other equipment, *there's more worth in Worthington. Worthington Pump and Machinery Corporation, Water Treating Section, Dunellen, N. J.*

JJ-1

WORTHINGTON

WATER CONDITIONING

Worthington Makes More of the Equipment for All Types of Water Conditioning Systems



Color Sells Textiles

Quality KEEPS THEM SOLD

COLOR like this cannot be described in thousands of words — yet it tells its own story, promises QUALITY at a glance. Manufacturers who specify Franklin Process Fast Color Yarns employ a powerful silent salesman.

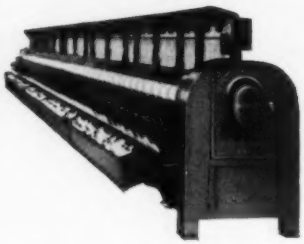
Franklin Process

LARGEST PACKAGE DYERS IN THE WORLD

Providence • Philadelphia • Greenville • Chattanooga
New York Representative — 40 Worth Street

DROPPED PLY

IT ISN'T POSSIBLE ON THE

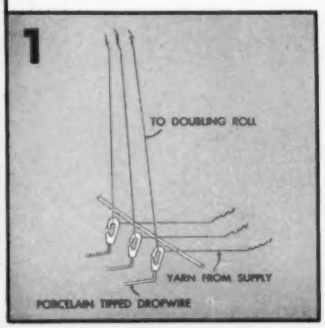


FOSTER MODEL 57 DOUBLER

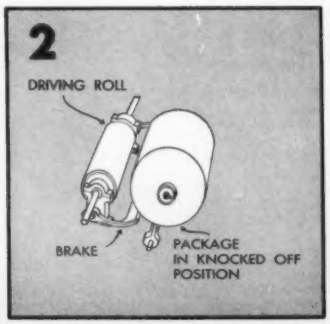
Each end drawn from bobbins or cones on the FOSTER MODEL 57 DOUBLER runs from the supply through a dropwire before reaching the doubling roll (see Figure 1). When supply from one cone or bobbin runs out, or when an end breaks, this dropwire falls and causes brake (see Figure 2) to stop package immediately. This prevents broken or run out end from reaching package (see Figure 3) and permits quick, easy single end piecing.

Note that the instantaneous acting brake comes up under the package and contacts it along the full length. This means quicker stops without damage to yarn. The dropwire brake action is only one feature of the Model 57. Here are some others:

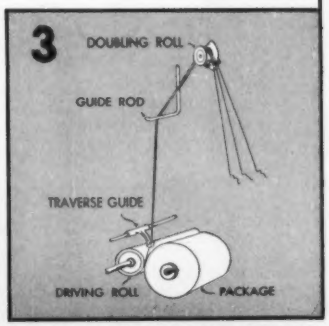
1. Machine may be equipped for one or two process doubling — direct from bobbins through slub catcher attachments, or from cones previously wound and inspected on FOSTER MODEL 102.
2. Guard prevents thread jumping off doubling rolls.
3. Minimum yarn strain by reducing number of sharp yarn bends.
4. Self-threading tension and slub catcher (when required) expedites quick threading and yarn inspection.



QUICK-ACTING STOP MOTION, with efficient brake, leaves sufficient yarn for single end piecing when supply runs out.



EFFICIENT BRAKE comes up under package and contacts the full length of tube. No adjustments, no parts to wear.



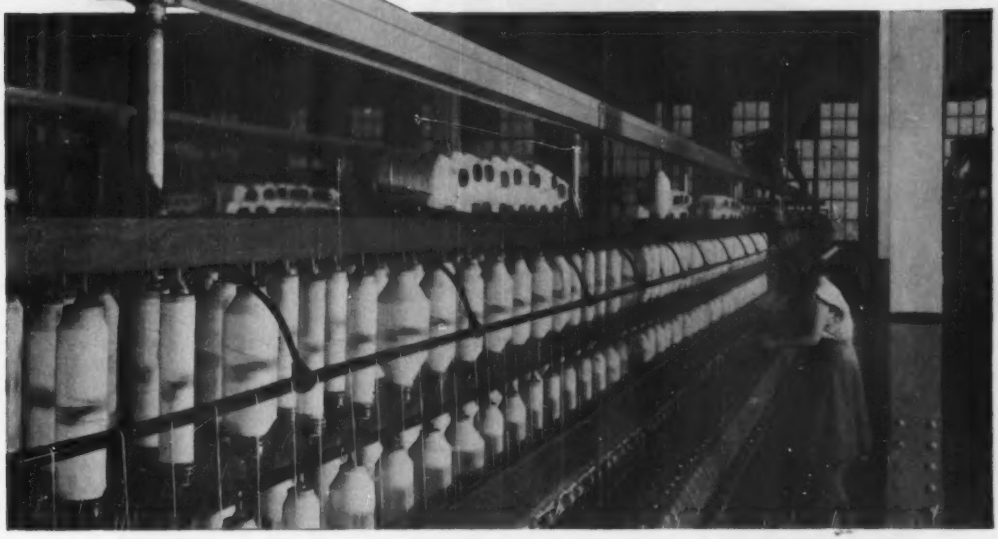
SHARP BENDS IN THREAD LINE ELIMINATED. Ends go from doubling roll to the Traverse Guide in back of package without any sharp bends. Minimum strain on yarn.

BULLETIN A-90 ON REQUEST

FOSTER MACHINE CO., Westfield, Mass., U.S.A.

SOUTHERN OFFICE: Johnston Building, Charlotte, North Carolina · CANADIAN REPRESENTATIVE: Ross Whitehead & Co., Ltd., 1475 Mountain St., Montreal, Que. · EUROPEAN REPRESENTATIVE: Muschamp Taylor Ltd., Manchester, England

Hidden power costs in your spinning room from increased oil viscosity?



GULFSPIN maintains its original viscosity even after extended service

—keeps power consumption low

Yes, oil viscosity has an important influence on power consumption of spinning frames! The higher the viscosity the more power consumed because of increased frictional drag.

Dirt, lint, water, and oxygen act to thicken spindle oils so that after several month's service an 80 Second oil may have a viscosity of 90-100 SUV at 100°F. As a result power costs in the spinning room can be appreciably higher than normal. And this increased cost is generally hidden because few mills run periodic power checks on spinning frames.

That's one important reason why it pays to use Gulfspin. This outstanding new oil does not undergo any appreciable increase in viscosity even after extended service. Thus it is possible to make substantial savings in power costs.

Gulfspin has many other characteristics which make it effective for spindle lubrication; it is not only resistant to the formation of sludge, but also prevents sludge from depositing on spindle shafts and bolsters—thus keeps spindles clean; it reduces wear because of excellent oiliness characteristics; and helps effectively to protect spindle parts against rust.

See for yourself on your frames that this new spindle oil is better in every way. Write, wire, or phone your nearest Gulf office and ask a Gulf Lubrication Engineer to call. Gulf Oil Corporation · Gulf Refining Company, Gulf Building, Pittsburgh, Pennsylvania.

FIFTY YEARS OF SERVICE
1901 GULF 1951
PETROLEUM AND ITS PRODUCTS

"SARCO used exclusively"

"The special direct reading Sarco Temperature Controls which you manufacture for us, both for air and water, are used exclusively by us in the production of our Fade-Ometer, Twin Arc Weather-Ometer and Launder-Ometer.

"We have found these controls very satisfactory from a performance standpoint, with a low incidence of repairs and maintenance over years of continuous service.

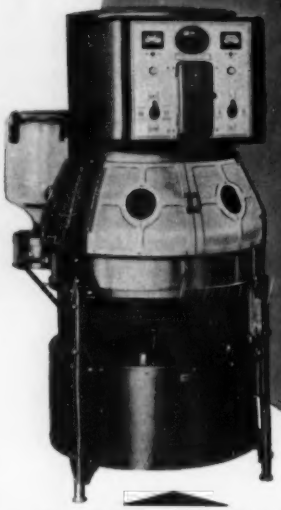
"We wish to express our appreciation for the cooperation we have received in the development and design of temperature controls, engineered to meet our particular requirements.

Atlas Electric Devices Co.

J. Erntow

Director, Research & Development"

Bring your temperature control problem to us. In our extensive range of electric and self-operated temperature controls for heating and cooling, we probably have exactly what you need.



The Atlas Fade-Ometer, famous the world over as the standard for determining the effects of sunlight on fading and aging of textiles. Equipped exclusively with Sarco temperature control; special case to harmonize with other instruments on panel.

Sarco type LSI Electric Indicating Temperature Controller, the leader in the line. Controls temperature and indicates the results on one easy-to-read dial. Ranges can be long or short. Four standard types of bulbs of various metals. Lead or Karoseal sheaths permit immersion in corrosive fluids, eliminating necessity for wells or sockets. Full information in Bulletin 1028.

Examples of Sarco Electric Temperature Controls for heating, air conditioning, refrigeration and process. Bulletin 1001.

351

SARCO COMPANY, INC.

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SARCO CANADA LTD., TORONTO 5, ONTARIO

REPRESENTED IN PRINCIPAL CITIES

Wool or no wool...

civilian and military

clothing needs must be filled!

Suitable replacement fabrics for scarce, expensive wool *must* be found to clothe the average family—and to meet certain requirements of the Armed Services.

The Warner & Swasey-Pacific Converter and Pin Drafter help meet this demand for top quality fabrics by supplying synthetic sliver—or accurate blends of wool and synthetic sliver—in volumes to meet today's huge requirements. A wide variety of fabrics can be made from these blends—materials that are stronger, longer lasting, shrink resistant, and less expensive.

WARNER & SWASEY-PACIFIC CONVERTER

- Eliminates opening, mixing, carding, and combing operations of cut staple
- Cuts continuous tow to desired lengths
- Exact percentages of blends
- Cuts costs on machines, labor, maintenance
- Less change-over time

WARNER & SWASEY PIN DRAFTER

- Eliminates costly steps in preparation of sliver for spinning
- Better, more evenly blended sliver in greater volume
- Less fly waste
- Uses either can sliver or ball top
- Applicable to various systems

Used separately, or in combination, these machines cut costs by eliminating many operations necessary in conventional systems of preparing sliver for spinning. Call in our Field Engineer in your territory for complete details. He'll be glad to show you how they can add new profits to *your* operation.

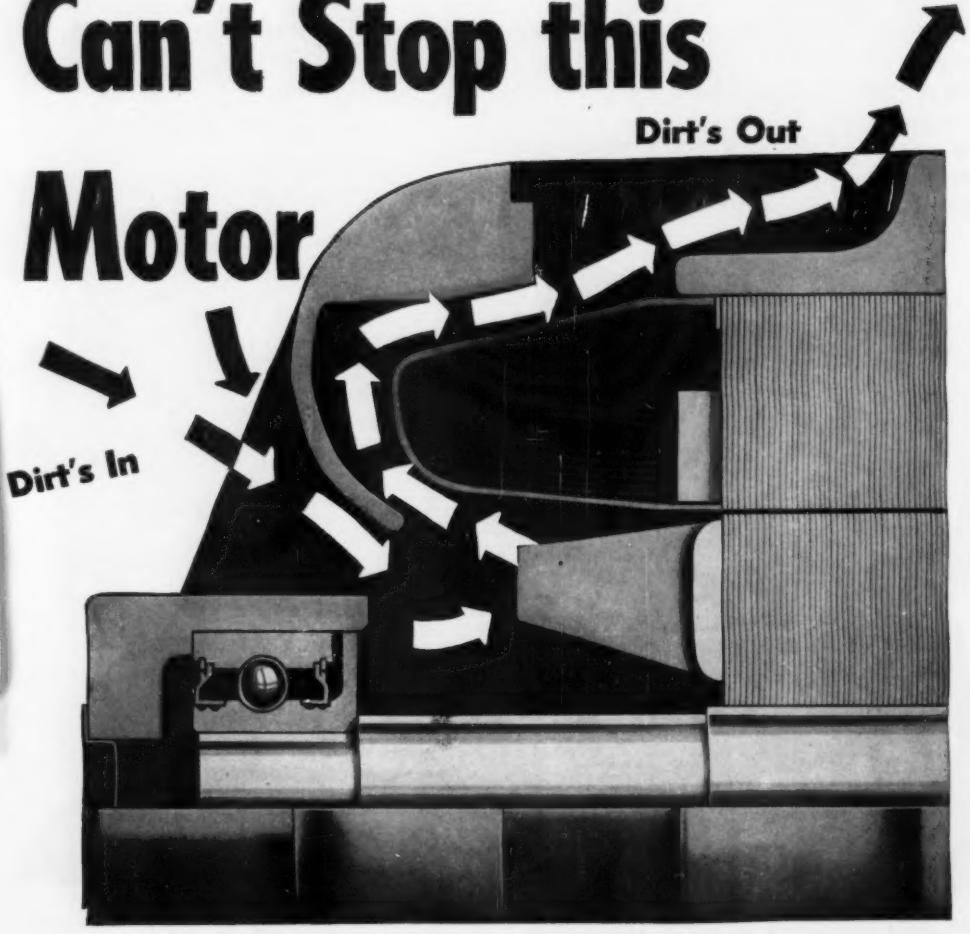
WARNER & SWASEY

TEXTILE MACHINERY DIVISION

BRANCH OFFICES:
61 Rivulet St., North Uxbridge, Mass. • 6910 Market Street, Philadelphia, Pa. • Candler Building, Atlanta, Ga.

YOU CAN PRODUCE IT BETTER, FASTER, FOR LESS . . . WITH A WARNER & SWASEY

Here's Why *Dirt and Lint* Can't Stop this Motor



For more information, write direct or use Reader Service post card.

Quick-Clean TEXTILE MOTOR

WIDE OPEN DESIGN AND POWERFUL FANS SWEEP LINT AND DIRT RIGHT OUT OF *Quick-Clean* MOTOR!

YOU HAVE NO MOTOR PROBLEM from lint-laden atmospheres when you use *Quick-Clean* textile motors. *Quick-Clean* motors have wide open passages for cooling air and powerful fans to sweep lint and dirt right out of the motor. Inside surfaces are smooth and hard so lint cannot lodge anywhere. Air passages are shaped for smooth air flow.

Quick-Clean motors also save you money with sealed bearings which eliminate usual expensive bearing maintenance procedures. Grease or oil cannot leak from the bearings to soil materials or gather lint and dirt. Lint and dirt cannot enter the bearing. Ask your nearest Allis-Chalmers Sales Office about the *Quick-Clean* textile motor Or write for the bulletin shown below which describes it completely.

MATCH QUICK-CLEAN MOTORS WITH A-C STARTERS!

This control was developed for dependable, safe starting of *Quick-Clean* motors. Other Allis-Chalmers motor control will give you dependable operation of all electrical equipment in your plant. Competent application engineers are always available through your nearby Allis-Chalmers Sales Office. A-3471

Allis-Chalmers
Milwaukee 1, Wis.

Quick-Clean, Texrope and Vari-Pitch are Allis-Chalmers trademarks.

Send for Free Engineering Literature

Quick-Clean Textile Motors	51B6055	Dielectric Heater	15B6431
Allis-Chalmers Loom Motors	51B7111	Power Generating Equipment, Transformers, Circuit Breakers, Power Distribution Equipment	25B6150
Texrope Drives	20B6051		
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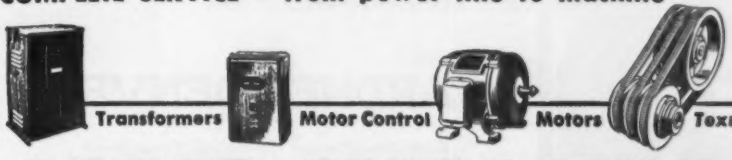
COMPLETE SERVICE — from power line to machine



ALLIS-CHALMERS

Originator of the Multiple V-Belt Drive for the Textile Industry

ask that nearby mill about GARDNER-DENVER RX COMPRESSORS

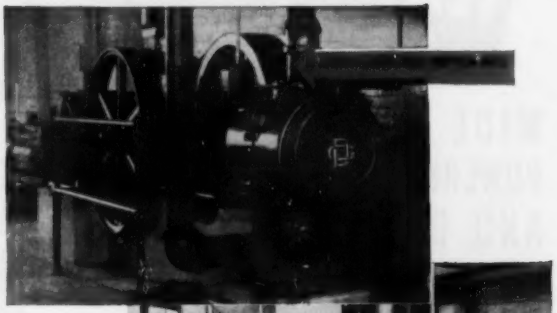
Your Gardner-Denver field engineer will gladly tell you about RX textile mill installations in your area. The chances are there's one nearby — where you can learn firsthand, for example

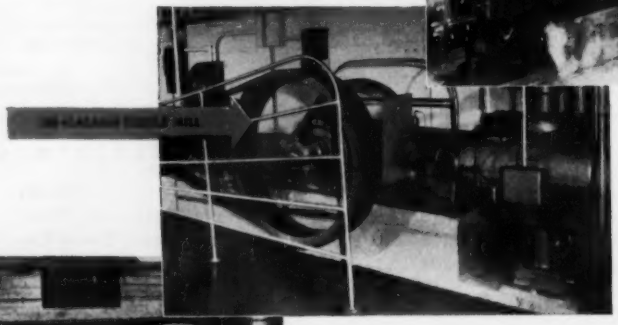
— that RX Compressors are rated highly efficient — because air flows freely through their large valve and port areas.

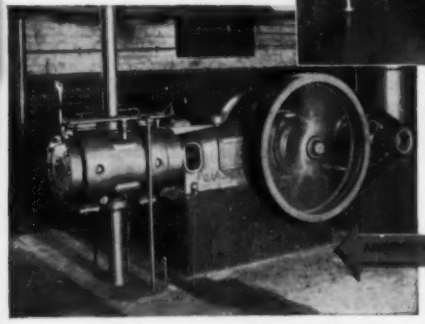
— that they're often called power-misers — thanks to the automatic control that limits power consumption to air demand.

— that maintenance records prove RX Compressors are always ready for round-the-clock service when production demands are high.

Write us for complete information.







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Gardner-Denver Company, Quincy, Illinois

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THE QUALITY LEADER IN PUMPS, COMPRESSORS AND ROCK DRILLS

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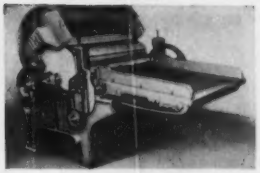
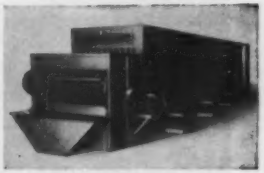
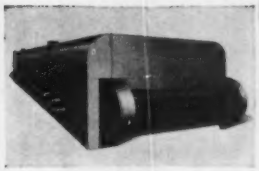
PREPARATORY MACHINERY SARGENT'S FOR THE TEXTILE FIELD



WET-and-DRY PICKER
All-job, cotton and all synthetic fibres . . . single process . . . opens and picks wet or dry stock thoroughly, economically.



CONTRA-FLOW DRYER
For all fibres . . . employs revolutionary counter-air-flow heating principle to provide rapid, economical drying . . . completely automatic.



RAW STOCK DRYER
Leader in its field . . . all fibres . . . conventional down-draft air circulation. Fast, trouble-free production.

STAINLESS STEEL WASHING MACHINE
Multi-purpose . . . continuous process scouring, bleaching, acidifying . . . stainless steel throughout . . . SARGENT-designed for high production, economy, efficiency.

AUTOMATIC FEEDER
Continuous, completely automatic operation. For scouring machines, openers, pickers, and all preparatory equipment.

Known and Accepted 'Round the World...

Wherever there are textile mills . . . from India to Indianapolis . . . from Chile to Chillicothe . . . from Singapore to Savannah . . . you'll find SARGENT Preparatory Equipment producing 'round the world, 'round the clock. Designed and built for the particular plant, process, production need. For trouble-free, speedy, top-quality production, in any country, any language, SARGENT Preparatory Equipment is tops!

Write us for your copy of the recent SARGENT Catalog #184.

BACKWASHER and DRYER
Continuous process . . . versatile . . . particularly useful to worsted spinners, custom combers and job dyers. Dryer has perforated plate or wire cloth aprons, individually motor-driven fans.

★ ★ SINCE 1832 ★ ★

SKEIN DRYER
Tensionless, uniform drying for all yarns. Each section individually controlled to attain peak efficiency in drying cycle for different fibres.

SARGENT'S LABORATORY
for Solving Your Drying Problems

C. G. SARGENT'S SONS CORPORATION maintains a complete, modern-as-tomorrow laboratory to aid customers and non-customers alike in solving drying problems. Not only for textiles, but leather, rubber, paper, synthetics, plastics, etc. Our experienced engineers are happy to test difficult-to-handle materials for you and to recommend procedures for you to gain your objective — efficient drying at economical cost. Call on SARGENT'S Laboratory when you have a drying problem. Maybe we can help.

MIXING PICKER (heavy duty)
Versatile, adaptable . . . extremely rugged, high-production unit for continuous blending systems.

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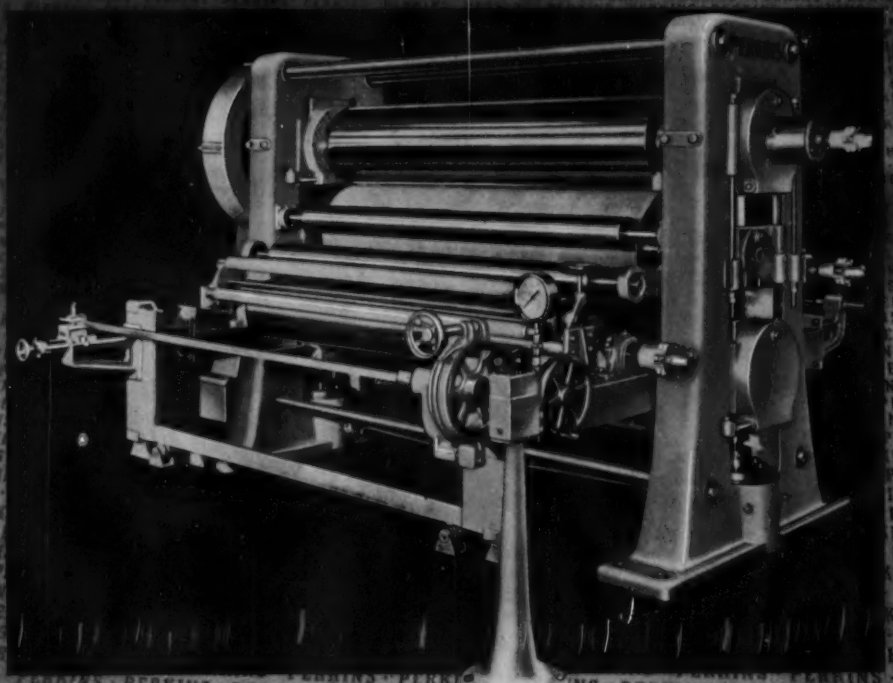


PERKINS POINTS WITH PRIDE

to this new three-roll 83" face 60-ton Hydraulic Rolling Calender. Top and bottom rolls, chilled iron. Intermediate roll, cotton. This calender is equipped with variable speed drive, pre-heating drum, cooling drum, three-bar tension group and a let-off which is adjustable laterally and horizontally.

B. F. PERKINS & SON, Inc.

HOLYOKE, MASS., U.S.A.

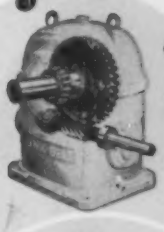
LARGEST MANUFACTURERS OF CALENDER ROLLS IN THE WORLD

Get the one speed reducer that best fits your job

LINK-BELT builds all three types of enclosed gear drives

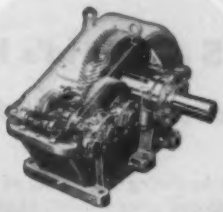
NO ONE speed reducer solves *every* reduction problem. That's why Link-Belt builds all three — Worm, Helical and Herringbone Gear Drives. Your Link-Belt power transmission engineer will recommend the *right* reducer for your needs.

You can be sure you get the one that suits all your requirements for ratio, space, shaft position, shock loading and many other factors. Precision-engineered for quiet, economical power transmission, all Link-Belt drives will give you long service under the toughest operating conditions.



On Worm Gear Drives, write for Book 2324-A

On Gearmotor and Helical Gear Drives, write for Book 2247

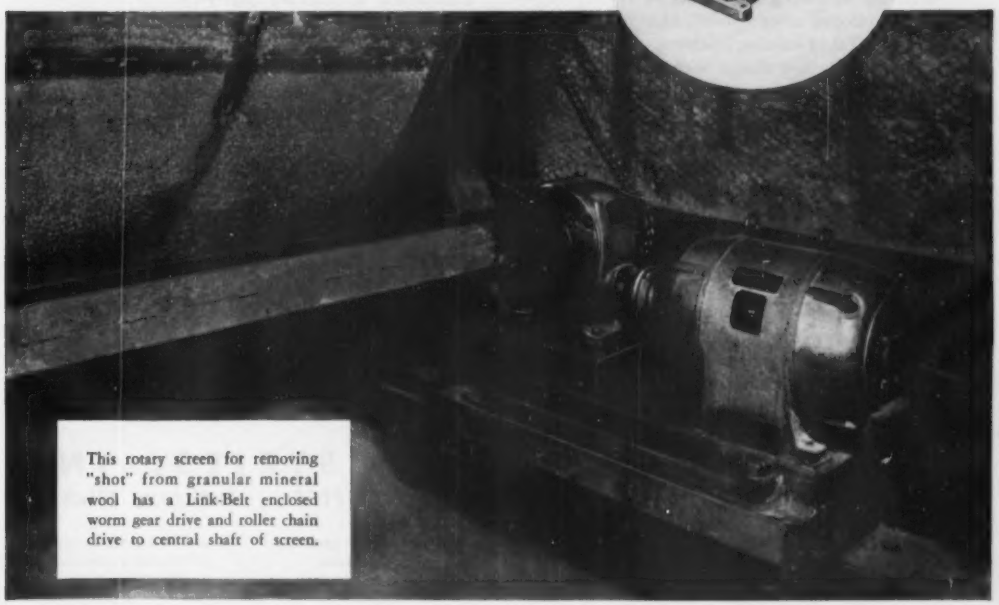


On Herringbone Gear Drives, write for Book 2419

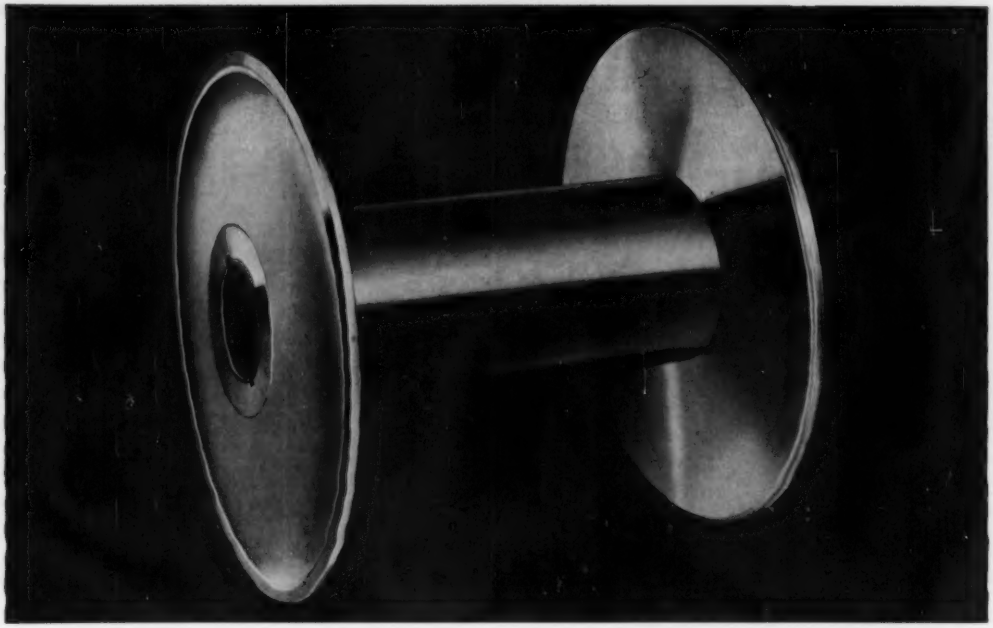
LINK-BELT

ENCLOSED GEAR DRIVES

LINK-BELT COMPANY: Chicago 9, Indianapolis 6, Philadelphia 40, Atlanta, Houston 1, Minneapolis 5, San Francisco 24, Los Angeles 33, Seattle 4, Toronto 8, Springs (South Africa). Offices, Factory Branch Stores and Distributors in principal cities. 12,410-B



This rotary screen for removing "shot" from granular mineral wool has a Link-Belt enclosed worm gear drive and roller chain drive to central shaft of screen.



HAYES ...world's largest producer of light metal beams

Scores again with heavy-duty, light metal Tricot Nylon Beam

With the increasing availability of Nylon, Hayes have developed a light metal, Heavy-Duty Nylon Beam for Tricot knitting machines. Although light in weight, the new design with the High Quality aluminum alloys employed, provides unusual strength, for the heavier pressures associated with Nylon.

EASILY SERVICED AND REPAIRED

The new Threaded Type Nylon Beams are easily serviced and repaired. Shaft bearings and keyways are reinforced and protected by malleable iron inserts. With reasonable care the better, stronger aluminum alloy used, insures you long life under heavy duty and long continued use.

HELPS TO CUT YOUR COSTS

Hayes Aluminum Nylon Beams are expertly finished, smooth and snag free, reducing your waste, and assuring you increased production. Because they require practically no servicing or maintenance, these precision made Beams help to cut your costs and produce better cloth.

DEMAND EXCEEDS SUPPLY

Thousands of Beams are shipped each year, but demand far exceeds the supply. In fact, to make delivery of some items, more than six months are required, and in fairness to our customers, orders must be filled in the sequence they are received. We will do our best to fulfill your requirements and welcome your inquiries.

Catalog of our material and brochure covering our manufacturing facilities furnished on request.

HAYES

INDUSTRIES, INC.

HOME OFFICE: Jackson, Michigan

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Philadelphia, Penn.

SOUTHERN REPRESENTATIVE
R. E. L. Holt Jr. & Assoc.
Greensboro, N. C.

For worms and gears—in standard sets or to special requirements—or as worm-gear speed reducers, including the economical fan-cooled Speedaire unit—you can always depend on Cleveland.

High quality worms and gears to meet your needs

● You pay no more for Cleveland worms and gears—and yet, built into them are extra years of service and satisfaction.

Uniform, high quality has been an outstanding characteristic of Clevelands through 38 years—a generation devoted to the manufacture of fine worms and gears exclusively. Specifically, there are four ingredients of Cleveland quality:

1. Correctness of design—design proved best by years of performance.
2. The finest of materials, selected after years of experience and research.
3. Modern machine tool equipment, in a modern plant kept up-to-date by a policy of continuous replacement.
4. Machinists and other production workers who are craftsmen, trained in precision work.

So whatever your need, consult Cleveland. Sales representatives in all major industrial centers are at your service, to help you select correct types and sizes and discuss any phase of your power transmission problems.

Write for the latest Cleveland catalog, indicating your requirements. The Cleveland Worm & Gear Company, 3268 East 80th Street, Cleveland 4, Ohio.

Affiliate: The Farval Corporation, Centralized Systems of Lubrication. In Canada: Peacock Brothers Limited.

Kidde Dry Chemical Extinguishers shield the operator from the flames with a heat-absorbent curtain of fine powder. The Kidde 20 pounder covers 36 square feet—44% MORE AREA than required by Factory Mutual Laboratories. The Kidde 30 pounder covers 48 square feet—as compared to the 35 square feet required by Factory Mutuals.

These Kidde extinguishers drive the dry chemical with enough force to overcome updrafts caused by the heat of the fire. The special Diffuser Horn applies the powder in a cloud-like pattern—helping to eliminate the splash of flammable liquids and offering the greatest protection to the operator.

For fires in textiles, flammable liquids and live electrical equipment Kidde Dry Chemical Extinguishers are highly effective. Write for information on portable or wheeled units.

Kidde

The word "Kidde" and the Kidde seal are trademarks of Walter Kidde & Company, Inc.

Walter Kidde & Company, Inc., 1191 Main Street, Belleville 9, N. J.

Walter Kidde & Company of Canada, Ltd., Montreal, P. Q.

OVER 500 MILLS USE THEM!

Lick your Tension Problems with Kidde Compensators!

You can stop worrying about losses from uneven tensions when you use a Kidde Compensator. There are three Kidde models designed to meet varied tension problems. Mills all over the country are now using thousands of them.

The Standard Model is specially designed for *moderate* speeds (approximately 300 yds. per minute) and tensions. Use it in quilling nylons and rayons . . . in warping rubber yarns . . . in winding of narrow fabric bobbins.

The Double Disc Model maintains constant tensions at speeds of approximately 1000 yds. per minute. It is excellent for tender, high twist yarns. Available in two types—10 to 140 grams and 100 to 300 grams.

The Warp Model maintains predetermined tensions uniformly on all warp ends. It produces smooth, level beams, eliminating troublesome slack and tight ends. Lost ends can be controlled by use of an available Kidde stop motion.

Fill in and send the coupon for full information on any or all of these effective Kidde tension compensators.

Walter Kidde & Company, Inc.
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Water Kidde & Company of Canada, Ltd.,
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Kidde

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1191 Main St., Belleville 9, N. J.

Gentlemen:
Please send me additional information on the Kidde Compensators.

Name_____

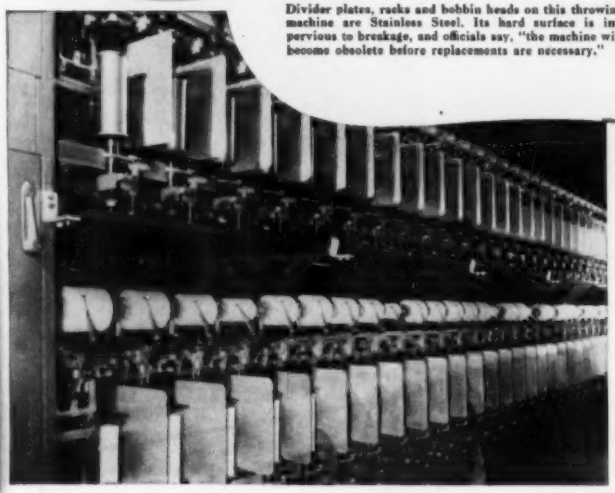
Company_____

Address_____

City_____ State_____

Throwing Mill eliminates all rust rejects by standardizing on Stainless Steel

Soaking fibre in the six Stainless Steel vats in the foreground conditions it for twisting, winding and weaving. Cylindrical cages that hold the skeins and centrifugals that remove moisture are Stainless, too. Its use in this operation prevents rust spots and makes maintenance easier.



Divider plates, racks and bobbin heads on this throwing machine are Stainless Steel. Its hard surface is impervious to breakage, and officials say, "the machine will become obsolete before replacements are necessary."

SCHNEIDER SILK MILLS takes every possible precaution to keep faults out of the fabric it weaves and knits. That's why the firm acquired its own source of thread and yarn four years ago by buying the Step Car Throwing Mill at Blakely, Pa. And that's why Stainless Steel is used in more than 90% of the throwing mill applications where machine parts actually touch thread or yarn.

Since all processes in a throwing mill are performed under moisture conditions ranging from complete submersion in the soaking process, to 55% to 76% relative humidity in the throwing rooms, the rust problem is obvious.

But the mill reports that all rejects due to contamination by rust from equipment have been eliminated through use of Stainless Steel. "Customer satisfaction and confidence are appreciably increasing, and the firm's position has become more secure through elimination of rust-caused defects," says Harold Bloch, Treasurer of Schneider Mills.

Purchasing Agent Jack LaZar takes a dollar-and-cents viewpoint: "First cost of Stainless is soon offset by savings in durability of thread-handling equipment parts, reduction of breakage of fiber on bobbins due to smoother edges of bobbin-heads subjected to steam, and elimination of rust due to replacement of former plated bobbin racks."

Wherever used, Stainless Steel equipment is proving to be a profitable investment for mill operators—and especially under present conditions. So give it a key place in your future program of quality control. And for finest performance, specify U·S·S Stainless Steel.

AMERICAN STEEL & WIRE COMPANY, CLEVELAND · COLUMBIA STEEL COMPANY, SAN FRANCISCO
NATIONAL TUBE COMPANY, PITTSBURGH · TENNESSEE COAL, IRON & RAILROAD COMPANY, BIRMINGHAM · UNITED STATES STEEL COMPANY, PITTSBURGH
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USS

U·S·S STAINLESS STEEL

SHEETS · STRIP · PLATES · BARS · BILLETS · PIPE · TUBES · WIRE · SPECIAL SECTIONS

9-1189

UNITED STATES STEEL

Ever see an IDEAL surface active agent?

WE HAVEN'T!... When you think of all the processing jobs you would give an "all-purpose" surface active agent, you'll appreciate the versatile properties it should have. The "ideal" product must be an effective *wetting agent or penetrant* . . . an efficient *detergent* . . . a good *emulsifying, dispersing* and *rewetting* agent . . . chemically *neutral* . . . easily *soluble* in water . . . quickly *rinsed* from fibrous materials . . . *stable* under all alkaline, acid, hard water and saline conditions . . . and *low in cost*. Since no ideal surface active agent has yet been produced, many textile mill men are solving their wet processing problems in a way that makes good sense.

Many mill operators are getting Houghton Men to help choose the right surface active agent for each application

Until an "ideal" product comes along that does *all* wet processing well, carefully selecting the *best* for each job is most important. You will produce better fabrics, cut processing costs, and speed production when you choose surface active agents for the job they do the best.

Houghton's research staff has made great strides in recent years to help you do just that. A variety of surface active agents were developed for various wet processing applications. To make selection easier for you, these fall into two groups. Each is identified by name and number.

Those named "Cerfak" signify *detergents* having wetting power as well as other desirable properties. Those called "Surfax" indicate a *wetting and rewetting agent*—although they also have additional properties.

To further simplify selection, Houghton's textile engineers developed a handy application chart. It is helping processors to choose proper surface active agents for *any* textile application. We will gladly send you one.

Remember, too, that Houghton's force of over a hundred technically trained men, backed by extensive research facilities, are eager to help solve special wet processing problems. Consult the Houghton Man when he calls on your mill or write to any Houghton plant for bulletins, prices, charts and special aid.

CERFAK and SURFAX
. . . products of

E. F. HOUGHTON & CO.
PHILADELPHIA · CHICAGO · DETROIT · SAN FRANCISCO

Ready to give you on-the-job service . . .

Know a sure cure for the creeps?

If it's not one thing around a plant, it's another. Maybe, with you, it's the creeps.

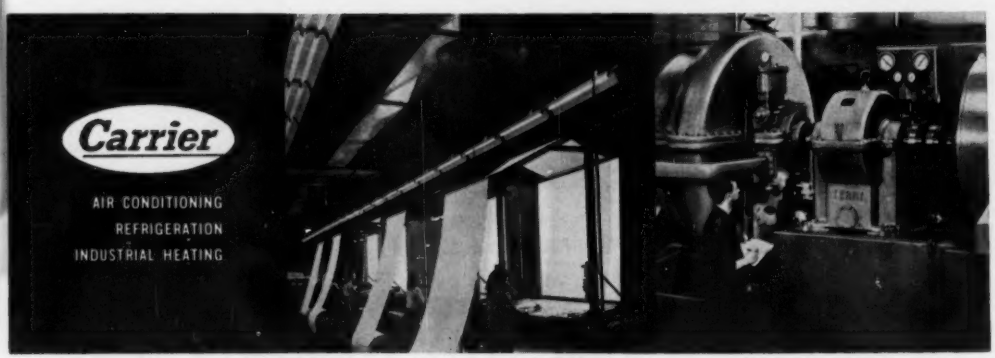
Machines creep out of adjustment and it's a slow, tricky process. Sometimes you don't even notice it till inspection shows up faults in your product. By that time you've run an expensive batch of seconds.

Or maybe the creeps will stop a machine altogether, with an end down or a thread break.

What causes creeping? Changing temperature, for one thing.

Now it's a fact your present evap cooling job was not designed to give you positive control of temperature. That takes added refrigeration, to keep your plant a smooth-running operation, with hardly a creep in sight.

Yes, the evap system you have now can be modernized. And because Carrier knows the textile business, you can bet the switch will be made just right for *your* mill. Call or write us. Carrier Corporation, Syracuse 1, New York.



They find few faults in cloth in the new Gerrish Milliken Mill, because of Carrier air conditioning. Individual chilled water controls permit varying the relative humidity to fit the fiber being run—with the temperature held at 80 degrees. A Carrier Centrifugal Refrigerating Machine (*right*) maintains this constant temperature. It has a capacity of 900 tons and supplies chilled spray water to several Carrier Central Station Systems.

Another GDC achievement

MARHEN PROCESS

for controlled vat dyeing

This process provides an electronic control for the reduction potentials which govern the dyeing efficiency of the vat dyebath. The benefits are obvious:

- Eliminates improper balance of chemical assistants
- Prevents over-reduction of sensitive vat dyes
- Yields batch to batch uniformity
- Obviates the need for titration and test paper controls
- Substantial economies in the consumption of chemicals (Trial mill runs indicate savings up to 50%)
- Low cost of apparatus
- Process can be run by regular mill help

The Marhen Process was developed thru the joint efforts of the Technical personnel of the General Dyestuff Corporation and General Aniline and Film Corporation.

The Marhen Process is another GDC contribution to greater technical efficiency in the field of wet processing.

For information on this latest innovation in vat dyeing address our nearest office.

GENERAL DYESTUFF CORPORATION

435 HUDSON STREET · NEW YORK 14, NEW YORK

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RUISBROEK

HERSTAL

ACEC
electric motors

are backed by 70 Years' Designing & Engineering Experience plus 4 Modern Plants

Four up-to-the-minute plants, utilizing the accumulated engineering and manufacturing experience of seven generations to produce the finest type electrical equipment, that's ACEC — Ateliers de Constructions Electriques de Charleroi, of Belgium.

And world-famous ACEC motors—from ¾ to 200 hp.—are now *immediately available* to American customers from warehouse stocks in the United States.

Conforming strictly to NEMA FRAMES AND SPECIFICATIONS, these 1-phase and 3-phase motors are not only products of long experience and scientific research, but of extreme care in manufacture and close attention to mechanical precision. They are built to give every possible satisfaction in service . . . to uphold the world-wide reputation for excellence that ACEC equipment has established.

Branches and representatives of ACEC are located throughout 50 countries, and service in the United States is available from 232 DISTRIBUTORS AND SERVICE SHOPS across the nation.

Whatever your electric motor requirements, write, wire, or telephone the nearest ACEC office or representative—or communicate with us directly in New York. Inquiries and orders receive prompt attention.

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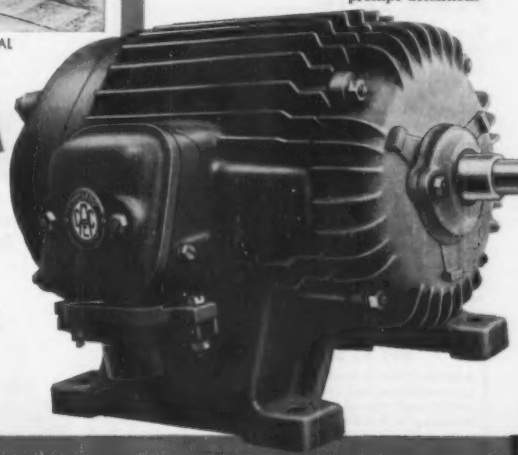

NOW ON HAND

Integral Horsepower Electric Motors—
¾ to 200 hp.
FULLY GUARANTEED

Available in the following types:

- ★ *Open Drip Proof Motors*
- ★ *Totally Enclosed Fan Cooled Motors*
- ★ *Pump Motors:*
  - *Style "C" Face Mounted*
  - *Style "P" Vertical Solid Shaft*
  - *Vertical Hollow Shaft*
- ★ *Adjustable Speed Schrage Motors*

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American Blower . . . a time-honored name in air handling

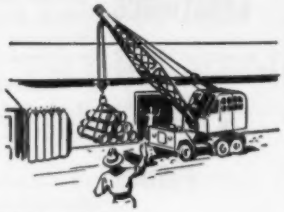
Buffalo, too, has a conveniently located American Blower Branch Office to provide you with data and equipment for air handling. You can reach American Blower in Buffalo by calling Washington 2668. In other cities, consult your phone book.

BETTER FABRICS . . .

Fine yarn filaments, strong plump fibers —these are the marks of a good textile mill. And, in many top mills, you'll find American Blower equipment helping in the control of inside temperature and humidity. For example, several of our large AHS Fans were ordered recently by an important Southern mill. The thing operators like about these fans is their non-overloading power characteristics and their remarkable efficiency over a wide range (which saves them money). May we help you with a similar problem?

HOSPITAL COMFORT . . .

A new Veterans' Hospital is going to be mighty comfortable—at least when it comes to ventilation. Reason—34 American Blower Sirocco Fans which were recently installed. These fans deliver more air per revolution than any other type of fan, operate at lower tip speeds, are unusually quiet, save power and require only a minimum of space for installation. For the best in air handling equipment, call American Blower.



POWER SAVER . . .

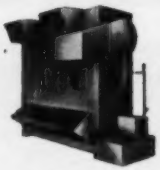
If you're concerned with power transmission, you'll want to know about our Gyrol Fluid Drives. Developed originally for use with mechanical draft fans, Gyrol Fluid Drives are today widely used in industry. They offer three important advantages—smoother acceleration, overload protection and substantial power savings. One company uses Fluid Drives on a crane that picks up acetylene tanks. Before they were installed, the tanks got such a violent swing from the quick start they would often damage building walls. Since using the Fluid Drives, they've had no trouble.

MAY WE SERVE YOU?

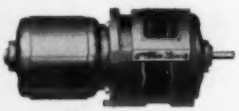
American Blower heating, cooling, drying, air conditioning and air handling equipment can do much toward improving comfort and efficiency in business. For data, phone or write our nearest branch office.

Unit Heaters

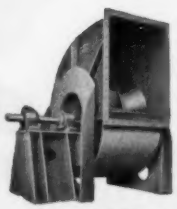
Ventura Fans



Air Conditioning Equipment



Gyrol Fluid Drives



Industrial Fans

AMERICAN BLOWER CORPORATION, DETROIT 32, MICHIGAN
CANADIAN SIROCCO COMPANY, LTD., WINDSOR, ONTARIO

Division of AMERICAN RADIATOR & Standard Sanitary CORPORATION

YOUR BEST BUY AMERICAN BLOWER AIR HANDLING EQUIPMENT

Serving home and industry: AMERICAN-STANDARD • AMERICAN BLOWER • CHURCH SEATS • DETROIT LUBRICATOR • KEWANEE BOILERS • ROSS HEATER • TONAWANDA IRON

Fans breeze through the shipping department in this H & D corrugated shipping box

Time spent packing goods for safe shipment often is a sizeable business expense—and with highly seasonal products, packing time can be an actual production bottleneck. The makers of Atlas-Aire fans solved their rush-season packing problem with this H & D corrugated box. Built-up pads replace the time-wasting packings formerly used, and protect the fans so well that damage claims now are negligible.

The Package Laboratory is ready to help with your packing problem, whether you're anxious to reduce packing time, or to cut costs . . . improve display . . . or provide better protection. For booklet, "Package Engineering," write Hinde & Dauch, 5106 Decatur St., Sandusky, Ohio.

H&D®

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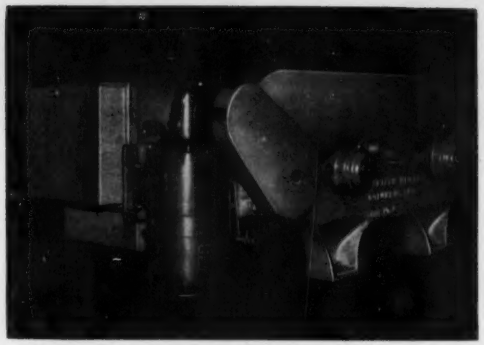
THE COMPLETE SLASHER CONTROL

LEWELLEN

AUTOMATIC SLASHER DRIVE

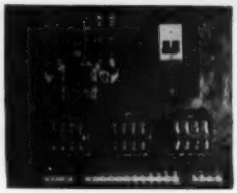
• Think what these features will mean to you. 1—Slow starting speed of 1/15th of running speed. 2—Gradual acceleration to running speed. 3—Gradual de-celerating to slowest speed — stops at end of beam winding. No coasting. 4—Every speed change is gradual. No broken yarns. 5—Automatic return to last exact running speed and when speed is reached, circuits are engaged automatically to moisture control. 6—When slasher is stopped for any reason, slowest spe.d is reset so that slasher always starts at slowest speed. 7—All control functions in instant control of operator. 8—Transmission and controls designed as one unit. 9—Control cabinet can be located at any convenient point. 10—Any number of push buttons may be placed around slasher for quick accessability. 11—For use with either Brown or Barber-Coleman Moisture Controls. When moisture controls are not used, Lewellen controls are operated by push buttons.



The Lewellen Transmission is completely enclosed with control motors, contactors, and all operating parts. Complete in one unit. Driven from present power motor. V-belt drives from power motor to transmission and from transmission variable shaft to slasher drive shaft.

Lewellen No. 12 class "F" Transmission with complete automatic slasher controls. Transmission is located under slasher and requires no additional floor space outside of slasher frame. Steel cover protects all interior parts. All parts lubricated while running, without removing cover.

The Control Cabinet encloses power motor starter, all control relays and terminal plates. It may be located at any convenient point near slasher.



The Lewellen Slasher Drive operates in the following manner:

When ends are on beam and ready, the start button is operated. This starts power motor and runs slasher at its slowest speed. When ready for running speed, run button is operated. The controls then gradually increase slasher speed up to its running speed. At this point the control automatically engages contacts to moisture control, if used. During winding operation, the moisture control, through the Lewellen controls, automatically adjust slasher speed as required to maintain uniform moisture. When a beam is finished, operator engages the slow button. This instantly disengages the circuits to moisture control and gradually reduces slasher speed to its slowest speed. The stop button is then operated, de-energizing power motor and stopping slasher. When slasher is ready to again start, operator engages start button, starting power motor and running slasher at its slowest speed. When ready, run button is again engaged and slasher gradually accelerates to its running speed. No matter how much the moisture control may have adjusted the speed on winding the last beam, the controls always return slasher to its last running speed, and at this point automatically engages control circuits to the moisture control. Where moisture control is not used, the control returns slasher to its last running speed and engages circuits to push buttons and speed is thereafter adjusted by the push buttons as required.

LEWELLEN MANUFACTURING CO., COLUMBUS, INDIANA

"HAVING TROUBLE WITH DIFFICULT WEAVES? THIS IS FOR YOU!"

"TELLS HOW EASY IT IS TO INCREASE YOUR WEAVING EFFICIENCY!"

NEW FOLDER tells how to size... spun rayon warps more efficiently!

Another Staley Development For the Textile Industry!

STA-GEL

THE NEW TYPE, HIGH EFFICIENCY SPUN RAYON WARP SIZE

for **SPUN RAYON**

and Mixtures of Staple Rayon with other Fibers

Makes Difficult Constructions Easy to Weave!

Find out how to cut rayon sizing costs... improve efficiency in your plant—*immediately!*

Troubled with difficult constructions, complicated *spun rayon weaves? Then send for this valuable* folder now. It tells the story of STA-GEL, the new high efficiency sizing for spun rayon and mixtures of staple rayon with other fibers.

Learn about the six major advantages that this new sizing offers you . . . the many ways in which STA-GEL has proved its effectiveness on complicated constructions in mills. You'll be amazed at the important time and money saving efficiency of new STA-GEL in your plant! Send now for the facts about STA-GEL!

A. E. Staley Mfg. Co., Decatur, Ill., U. S. A.

THERE IS A SUPERIOR QUALITY STALEY STARCH FOR EVERY TEXTILE NEED

Dependable Service from

Atlanta, Ga.
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San Francisco, Calif.
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STA-GEL The new type, high efficiency **SPUN RAYON WARP SIZE**

MADE BY STALEY'S

A. E. Staley Mfg. Co., Dept. TW-11
Decatur, Ill., U. S. A.
Send me the facts about STA-GEL, the new kind of rayon sizing.

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COMPANY_____

ADDRESS_____

CITY & ZONE_____ STATE_____

What Price . . . A Drop of Acid?

The price of a drop of acid is mighty small as long as you keep it in a carboy. But let it out — give it half a chance to get to your equipment — and it really can get expensive.

In textile mills, particularly, chemical attack is a major problem — one that can cost plenty in "down time" and equipment replacement — one that can cause no end of headaches. But you can stop your troubles before they start — keep the cost of chemical fumes and spillage 'way down — with TYGON "Series TP" PAINT. Virtually all acids, alkalies, oils, and waters roll off a TYGON painted surface "like water off a duck's back".

Here's just some textile making equipment that can benefit from the protection of TYGON PAINT: Wash tanks, kiers, steeping tanks, mercerizing units, "jigger machines", dye vats, continuous dye machines, filters, pumps, and piping. TYGON also does an excellent job of protecting structural steel, walls, and ceilings from chemical attack.

246C

And, here are some of the textile chemicals that are "stopped" by TYGON: Chlorine and bleaching solutions, sulfuric acid, iron sulfate, salt, caustic soda, soda ash, stannic chloride, sodium silicate, malt, tannin, resorcine, diazo compounds, animal and vegetable oils, fats, and greases.

TYGON PAINT is available in a wide range of colors. It requires no more surface preparation than that of good commercial practice. It is easily applied by brushing or spraying. Its dry film is smooth and practically impermeable. It's tough, flexible, non-aging, non-inflammable and easy to clean.

Make your first line of defense against chemical attack a good, thoroughly protective coating! Make it TYGON PAINT!

Don't delay, write, today, for full details and technical data. Just ask for Bulletin 720.

Address: The U. S. Stoneware Co., Akron 9, Ohio
Plastics and
Synthetics
Division

TYGON
the corrosion-resistant plastic
PAINT

In a comprehensive review of Lille's International Textile Exposition, published in the July issue of Textile World, the author writes, in part, "I talked with many people from other countries, and a majority of them seemed most intrigued with Whitin Machine Works' Model "J" Comber . . . my impression was that it could easily be called the *hit of the show*."

When so many mill executives from all parts of the world show such enthusiastic interest in one particular machine, that machine must have much to recommend it. The Model "J" Comber was instantly recognized as an advance of major importance by production-minded representatives of all mills manufacturing quality combed yarns.

A new cam and gearing organization for operating the detaching rolls permits an increase of 27% in speed of the combing cycle — 150 nips per minute. Its development brings to the industry a new comber which combines high production with superior quality of thoroughly combed sliver. The comber is capable of producing an average of 34 pounds per hour.

A 14" coiler can carried on a can table that receives a circular but non-rotating motion now takes two slivers instead of the usual one. Slivers are smoothly coiled, free from twist insertion, easily separated when being fed to the drawing frame. Reduces number of cans needed in drawing process by 50%. The width of draw box has been increased to 9½" insuring better drafting of fibres.

You'll find the new Whitin Model "J" Comber a worthy addition to an already famous line of textile machines — a notable example of quality machinery built for long service and profitable performance.

Write today for our illustrated folder describing the new Model "J" Comber.

Whitin MACHINE WORKS

WHITINSVILLE, MASSACHUSETTS

CHARLOTTE, N. C. • ATLANTA, GA. • SPARTANBURG, S. C. • DEXTER, ME.

ELECTRONICALLY-CLEAN *Air* FOR JUDSON MILLS*

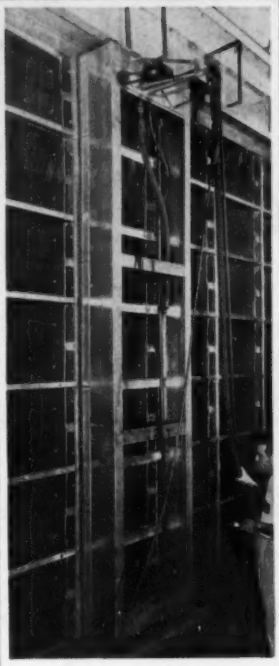
*Plant at Greenville, S. C.; N. Y. Sales Agents: Deering Milliken Co.

SMOKE
SPUN INTO YARN?

Yes, it used to be at Judson Mills. Cost them money, too, for it made the yarn streaky and smudgy, and much of it had to be sold as dark shades rather than as premium-commanding light or pastel shades. To complicate things, light shades produced in winter for the spring and summer markets were getting the full effect of all the smoke and soot thrown into the air by nearby factories and residences.

But Judson began engineering these dirt losses right out of their mill in 1940 with PRECIPITRON,® the electronic air cleaner. Their first installation was so successful that they have since added over 1,000,000 cfm capacity. Now the bulk of their production is in the light shades.

Let air cleaning, air conditioning or air handling *put air to work* for you. Call your Westinghouse-Sturtevant office, or write Westinghouse Electric Corporation, Sturtevant Division, Hyde Park, Boston 36, Mass.



Judson Mill's PRECIPITRON units with semi-automatic washer not only give them top air cleaning efficiency, they also simplify the dirt disposal problem. Washer boxes automatically flush dirt off collector plates, leave unit ready for next cycle.

YOU CAN BE SURE...IF IT'S

Westinghouse

J-80237B

NOW more STYMER is AVAILABLE

to help you cut sizing costs

Production of Stymer, Monsanto's synthetic resin sizing agent for rayon, has just been increased again. If you are looking for ways to speed production and cut costs, *now* is the time to get in touch with Monsanto. Here's why:

Stymer is uniform, dependable. A synthetic product, with definite and controlled properties, Stymer permits you to control your slashing and weaving processes more accurately, more economically.

Stymer is easily mixed and stored. Large batches of Stymer can be mixed in advance and stored uncovered for long periods, without loss.

Stymer doesn't gel when cold. It doesn't clog pipes or valves . . . doesn't "scum" in the size box . . . saves costly, time-consuming cleaning.

Stymer cuts weaving costs by reducing or eliminating static problems . . . by reducing shedding and accumulations at the drop wires, heddles or reeds . . . by preventing warp chafing . . . and in many other ways.

Stymer desizes in a hurry. Easily rinsed in warm water with a detergent in jig, beck or continuous washer, Stymer leaves the goods well prepared for subsequent operations. One more reason Stymer is in heavy demand in many of the largest and best-known rayon mills!

Stymer: Reg. U. S. Pat. Off.

Stymer successfully used in leading mills

Stymer has proved its advantages in 115 of the principal rayon mills in the United States after full evaluation of its efficiency and economy.

Why not bring these benefits to your mill?

FOR FULL INFORMATION ABOUT STYMER . . . FILL IN AND MAIL THE HANDY COUPON

MONSANTO CHEMICALS – PLASTICS

SERVING INDUSTRY... WHICH SERVES MANKIND

MONSANTO CHEMICAL COMPANY, Textile Chemicals Dept., Desk TWT 43, Everett Station, Boston 49, Mass.

Please send me information on Stymer.

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Company _____

Address _____

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MONEY BACK!

If you don't agree 100% that Sylvania Fluorescent Tubes are the Finest you've ever used!

ACCEPT SYLVANIA'S "NO-RISK" OFFER... THE GREATEST IN LIGHTING HISTORY!

Try 24 Sylvania Fluorescent Tubes of any popular type. If they don't give more light and maintain color and brightness for a longer time than any other brand, send them back with the signed Certificate of Assurance and your money will be refunded!

Superior Sylvania Quality makes offer possible!

Sylvania's progressive research and precision manufacturing control the important elements of fluorescent tubes, namely . . .

1 COIL COATINGS containing Zirconium extended the active life of the coils and was a major factor in enabling Sylvania to triple the rated life of fluorescent tubes.

2 FLUORESCENT POWDERS, newly improved and rigidly controlled as to thickness and uniformity on glass of each tube, mean better, more even light for a longer time.

For outstanding electrical work of any kind, call the Electrical Contractor who displays this emblem

QUALIFIED LIGHTING CONTRACTOR AUTHORIZED SYLVANIA SALES & SERVICE

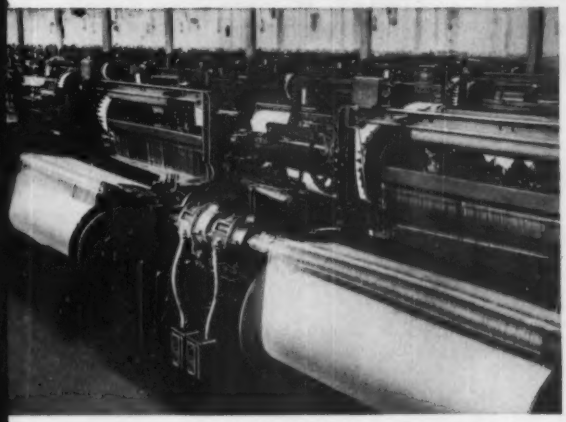
SYLVANIA

Sylvania Electric Products Inc., 1740 Broadway, New York 19, N. Y.

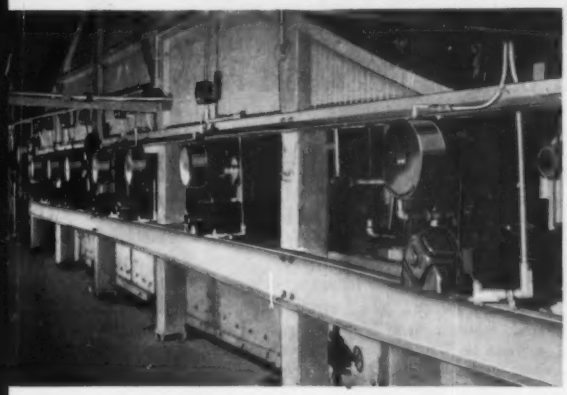
FLUORESCENT TUBES, FIXTURES, SIGN TUBING, WIRING DEVICES; LIGHT BULBS; RADIO TUBES; TELEVISION PICTURE TUBES; ELECTRONIC PRODUCTS; ELECTRONIC TEST EQUIPMENT; PHOTOLAMPS; TELEVISION SETS

CUTLER-HAMMER

MOTOR CONTROL FOR THE TEXTILE INDUSTRY



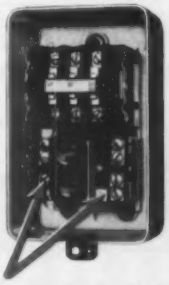
for a LARGE GEORGIA MILL. Cutler-Hammer Loom Switches mounted on double pedestals in the weave room of a well known Georgia mill.



for EDDYSTONE. Cutler-Hammer Dancer Roll Rheostats and Transfer Switches are used on soaper range in this great Pennsylvania textile mill.

CUTLER-HAMMER EUTECTIC ELEMENT OVERLOAD PROTECTION

One of the most ingenious and useful inventions of all time, Cutler-Hammer Eutectic Element Overload Protection accurately duplicates, measures and responds to heating effect produced within the motor. The world's most widely used and the world's most dependable motor overload protection, not only permits the motor to work *closer* to capacity in all cases but to do so in perfect safety. A standard feature of Cutler-Hammer Control.

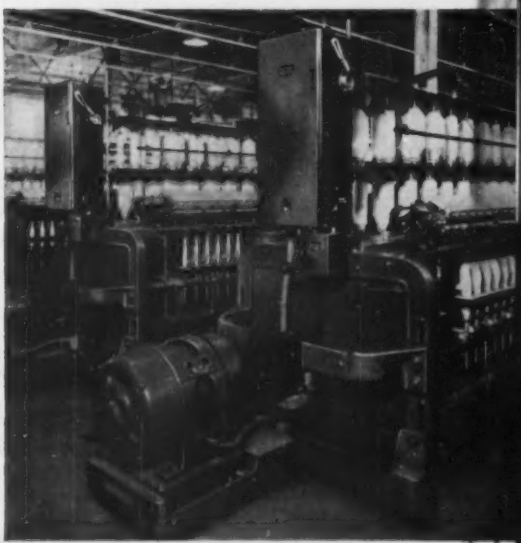


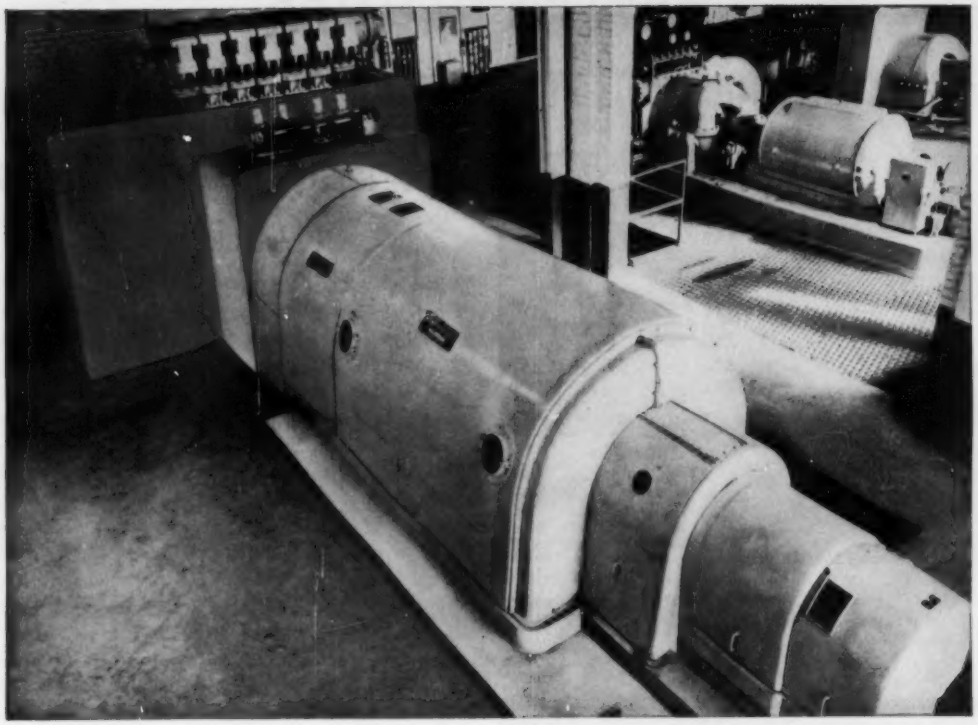
Two things wise management selects carefully

What a foreman is to a crew of workmen, Motor Control is to motors and machines. *Good* Motor Control insures that motorized machines are started properly, sees to it that these machines keep running at the peak of their productive capacities, yet prevents overloading that would lead to breakdown and exasperating, costly delays. And wise management selects *neither* Supervision *nor* Motor Control carelessly, but insists upon the best it is possible to get. 59 years of pioneering specialization in the design and construction of Motor Control has given Cutler-Hammer Motor Control a world wide reputation for performance and dependability. And whether you make exhaustive comparisons for yourself or profit by the experience of other leaders in the industry, your search for the best will lead to but one choice. CUTLER-HAMMER, Inc., 1457 St. Paul Avenue, Milwaukee 1, Wisconsin.

CUTLER-HAMMER
MOTOR CONTROL
C-H

at GREENWOOD. Cutler-Hammer Starters and Shipper Rod Switches on motors operating these spinning frames in the Mathews Plant, Greenwood Mills.





How Rock Hill and Worthington Balanced Steam and Power

During its fast growth, Rock Hill Printing and Finishing Company, Rock Hill, South Carolina, has made extensive changes in the power plant.

Since 1929 electrical demand has greatly increased. Also, plant process has called for large quantities of steam at 90-100 psi and at 15 psi pressure.

When a new 150,000 lb-hr boiler was installed, another Worthington 5000-kw non-condensing extraction-type turbine generator was also installed. This latest Worthington unit operates on steam at 230 psi, 575 FTT, and automatically extracts steam at 100 psi, exhausting at 15 psi back pressure.

The unit has sufficient flexibility between extraction and back pressure to handle variations in flow requirements and to carry an electrical load varying from 3000 up to an anticipated 5000 kw.

By purchasing a *Worthington* unit, Rock Hill also benefits from unit responsibility for design, assembly and performance.

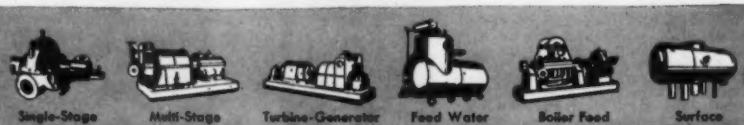
Worthington builds turbine-generator sets in sizes up to 10,000 kw and in all types. For detailed proof that *there's more worth in Worthington*, call our nearest office or write to Worthington Pump and Machinery Corporation, Steam Turbine Division, Wellsville, New York.

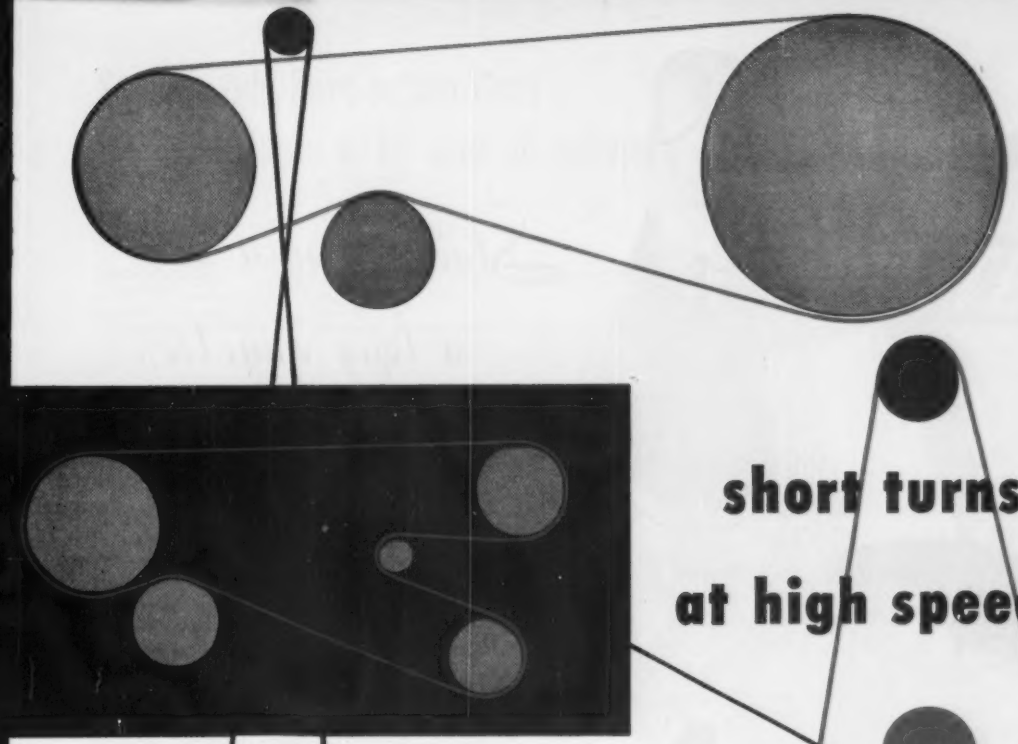
WORTHINGTON

STEAM TURBINE GENERATORS

T.17

A GREAT TEAM IN STEAM





short turns at high speeds

Condor WHIPCORD ENDLESS BELTS

"I was beginning to think no flat belt could stand up on that drive . . . but now I've found a belt I don't believe any drive can kill!"

Statements like this are typical from users of Condor Whipcord Endless Belts on troublesome drives . . . short centers . . . small pulleys . . . reverse bends . . . high speeds . . .

The endless-wound cord is destretched in manufacture to remove inelastic stretch. Cover-end is made inseparable with the Extensible-Tip. These and other advantages are described in Bulletin 6869 D, mailed on request.

This same rugged service is built into R/M hose, V-belts and conveyor belts. Just phone your R/M Distributor.

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RAYBESTOS-MANHATTAN, INC.

Manufacturers of Mechanical Rubber Products • Rubber Covered Equipment • Radiator Hose • Fan Belts • Brake Linings • Brake Blocks • Clutch Facings • Packings • Asbestos Textiles • Powdered Metal Products • Abrasive and Diamond Wheels • Bowling Balls

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To meet the demands of national defense and civilian needs, stainless must go a long way. That's why, now, more than ever—if you use stainless—use it wisely and efficiently.

Stainless is a name given to a broad list of grades and finishes—therefore, careful selection of the best available materials for your job is of prime importance. Here Crucible, a pioneer in the development of stainless steels, can help you get the most out of your share of stainless stocks through the unparalleled experience of our metallurgists and stainless fabricating specialists.

And when you can't get the grade of stainless you need, Crucible technical personnel can give you sound advice on the best available materials.

Until the time when stainless is more freely available . . . stretch your supplies of stainless. To do this . . . make use of Crucible's wealth of stainless steel experience.

CRUCIBLE first name in special purpose steels

51 *years of* *Fine* *steelmaking*

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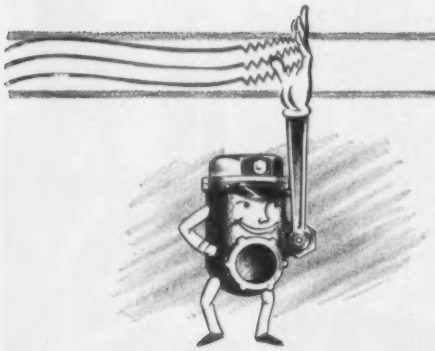
STAINLESS • REX HIGH SPEED • TOOL • ALLOY • MACHINERY • SPECIAL PURPOSE STEELS

For more information, write direct or use Reader Service post card.

Specify this Fast-action Gate for quick, sure STOP and GO services

JENKINS



BRONZE GATE VALVE

125 lbs. Steam
200 lbs. O.W.G.
¼" to 2"

Wherever full, free flow is essential . . . where valve opening and closing must be instantaneous . . . Jenkins SWINGTITE Fast-Action Bronze Gate Valves are setting new standards of performance and endurance.

The exclusive rolling disc and guide track design in the new Jenkins SWINGTITE distributes the wear, assuring maximum tightness (since it prevents uneven wear of seating surfaces), and lengthens valve life.

Use the SWINGTITE wherever fast-action valves take a beating on your processing lines. Compare it for long life and low maintenance. Prove for yourself that day after day it opens freely for full flow, and, closed, it seats tight and *stays* tight.

Ask your Jenkins Distributor for the folder, Form No. 196, describing the SWINGTITE in detail. Or write: Jenkins Bros., 100 Park Ave., New York 17; Jenkins Bros., Ltd., Montreal.

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SETTING NEW RECORDS FOR LONG LIFE AND LOW MAINTENANCE IN

- Oil refineries
- Textile finishing plants
- Chemical and food plants
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- Mines and mineral refining

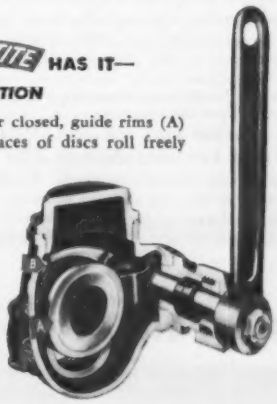
AND IN SUCH APPARATUS AS

- Laundry machinery
- Dish-washing equipment
- Gasoline and fuel oil lines on motors, burners, etc.
- Fire extinguishing steam lines

ONLY THE SWINGTITE HAS IT—

ROLLER ACTION

As the valve is opened or closed, guide rims (A) around the seating surfaces of discs roll freely over guide tracks (B) cast in the body, distributing wear evenly, dislodging foreign matter, and providing a polishing action for seating surfaces. This rolling disc and track construction lengthens valve life and assures maximum tightness.



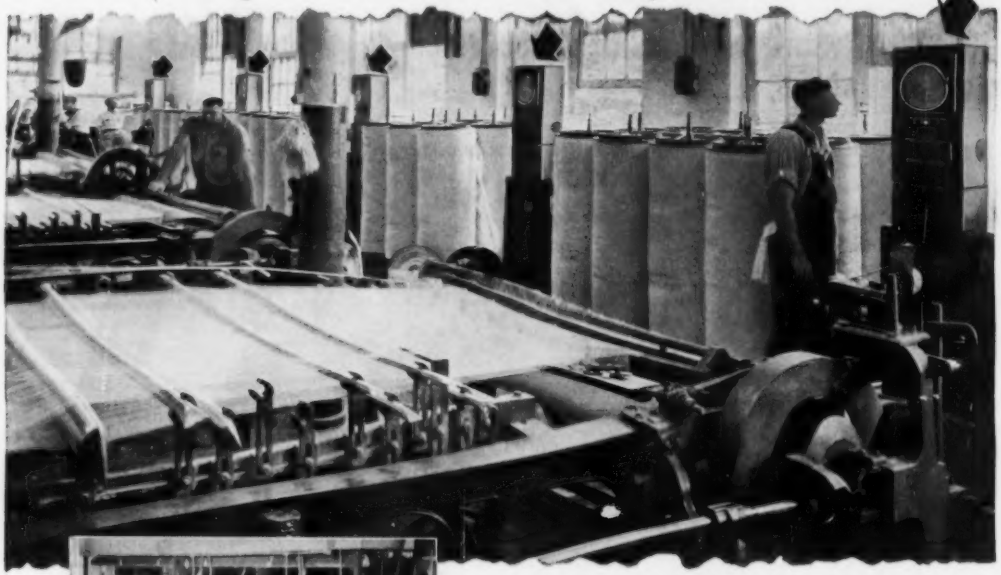
JENKINS VALVES

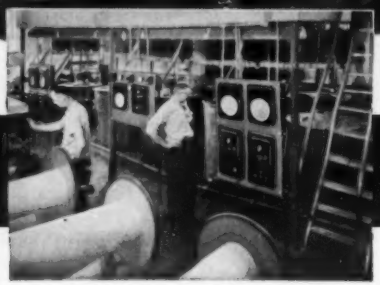
LOOK FOR THE DIAMOND MARK

TRADE JENKINS MARK

Jenkins Bros

Successful Slasher Operation...





... begins with

BARBER-COLMAN

Automatic Controls

Actual installations in a typical southern cotton mill. Top illustration shows a group of Barber-Colman Electronic Moisture Content Controllers.

•

Lower photograph illustrates Barber-Colman "Temchron" Electronic Size Cooking Controllers in combination with temperature recorders which keep permanent records of size cooking process.

Here is COMPLETE control for your slasher room. All-electronic "MCC" Moisture Content Controllers, "Temchron" Electronic Size Cooking Controllers — as well as other automatic units for size level, cylinder temperature, size box temperature, storage kettle temperature, room temperature, and relative humidity — are available to suit the exact needs of any mill. Successful mills are achieving new standards of quality and uniformity in their slasher room operations through the use of Barber-Colman control equipment. Problems that plagued the slasher hands have smoothed out, seconds have been reduced toward the vanishing point, loom beams going to the weave room have a new uniformity. Mills such as the one illustrated above have taken advantage of the benefits provided by Barber-Colman control equipment. Would you like to see what could be done for your slashing process? Our engineers, backed by 45 years experience in the textile field, are ready to make a survey for you at no obligation.

See your Barber-Colman representative for complete details or write for bulletins F-3156 and F-3054.

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BARBER-COLMAN COMPANY, Rockford, Illinois

BOSTON, MASS. • GREENVILLE, S. C. • ATLANTA, GA. • GREENSBORO, N. C.

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You can see the quality of Torrington Needles in the quality of the knitting they produce. Remember, there's a Torrington Needle for *every* type of knitting.
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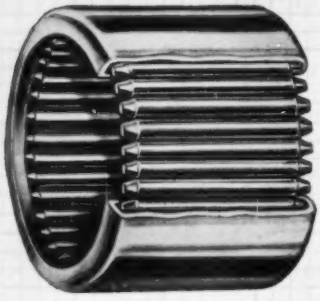
smooth performance...



TORRINGTON *NEEDLE* **BEARINGS**

The low coefficients of starting and running friction of Torrington Needle Bearings assure smooth performance in either rotating or oscillating applications.

A full complement of small diameter rollers provide high load capacity. And since Needle Bearings hold a large reserve of lubricant, little service attention is required to insure long, dependable performance.

Our engineers have helped incorporate the efficient anti-friction performance of Torrington Needle Bearings into a wide variety of products. Why not ask them to help with your application?

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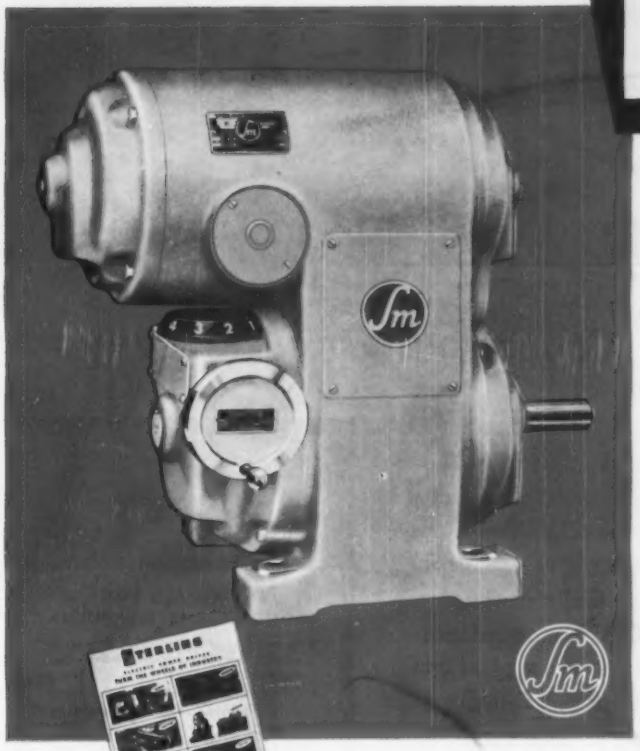
TORRINGTON *NEEDLE* BEARINGS

NEEDLE • SPHERICAL ROLLER • TAPERED ROLLER • STRAIGHT ROLLER • BALL • NEEDLE ROLLERS

power modernization

Even a brand new motor may be obsolete...

if you do not have control of speed



Ask for your copy of— pictorial bulletin No. 170, showing Sterling Electric Power Drives Turning The Wheels of Industry.

TEXTILE YARN PRODUCER STATES

By replacing standard motors with Sterling Speed-Trol Electric Power Drives on our yarn twisting machines, machine productivity was increased approximately 19% and cost reduced approximately 20%.

STERLING SPEED-TROL

...GIVES YOU VARIABLE SPEED CONTROL NECESSARY FOR:

PROCESS CONTROL OF: Temperature—viscosity—level—pressure—flow—etc.

TIME CONTROL OF: Baking—drying—heating—cooking—pasteurizing—soaking—chemical action—etc.

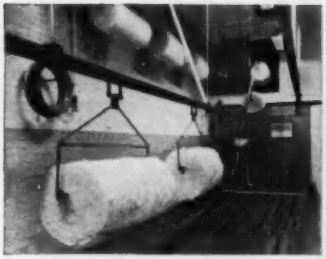
EQUIPMENT ADAPTATION TO: Load variation—sequence synchronization. Size—tension—hardness or shape of materials to be processed—machined—conveyed—blended—mixed—etc.

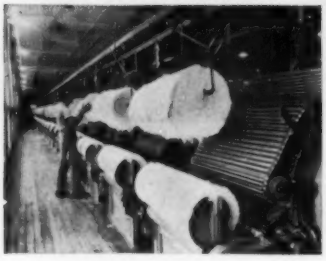
VARIATIONS IN: Quality—quantity—operators' abilities—etc.

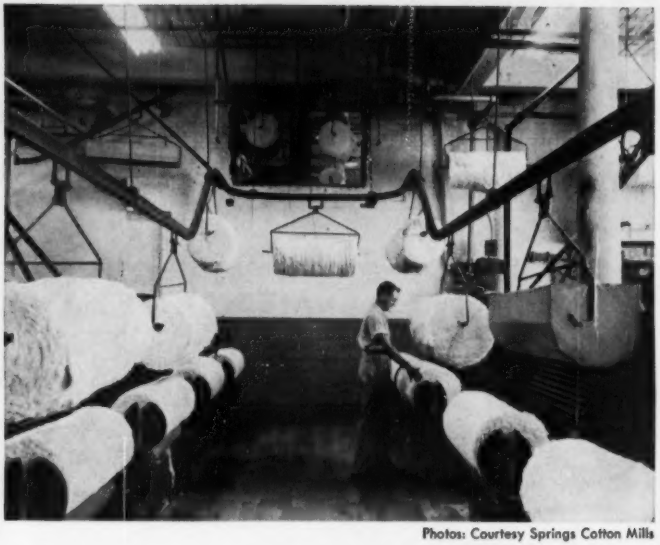
STERLING ELECTRIC MOTORS

Plants: New York 51, N. Y.; Los Angeles 22, California; Hamilton, Canada; Santiago, Chile
Offices and distributors in all principal cities

RAISE production..LOWER costs







Photos: Courtesy Springs Cotton Mills

with "Zig-Zag" Continuous Power Conveyors

Here you see how "Zig-Zag" solves a complex handling problem in the Springs Cotton Mills at Lancaster, South Carolina. In almost every imaginable industry, R-W "Zig-Zag" Conveyors are serving production and processing lines—increasing efficiency, cutting costs. Specifically designed to carry light loads through confined or crowded areas, "Zig-Zag" is adaptable to almost every plant condition or layout. And the savings effected with R-W "Zig-Zag" Conveyors are so substantial, the equipment pays for itself quickly—in most cases in less than a year! For further information, call, write, or wire our nearest office.

ENGINEERED FOR ECONOMY AND FLEXIBILITY

- Horizontal and vertical units alternate in a continuous chain traveling through special steel tubing.
- Complete flexibility for installation in any plant. Easily installed, easily changeable to conform to plant alterations.
- SAFE—all moving parts are fully enclosed.
- Low first costs. Low Power Factor.
- Standard horizontal or vertical curves—two-foot radius.

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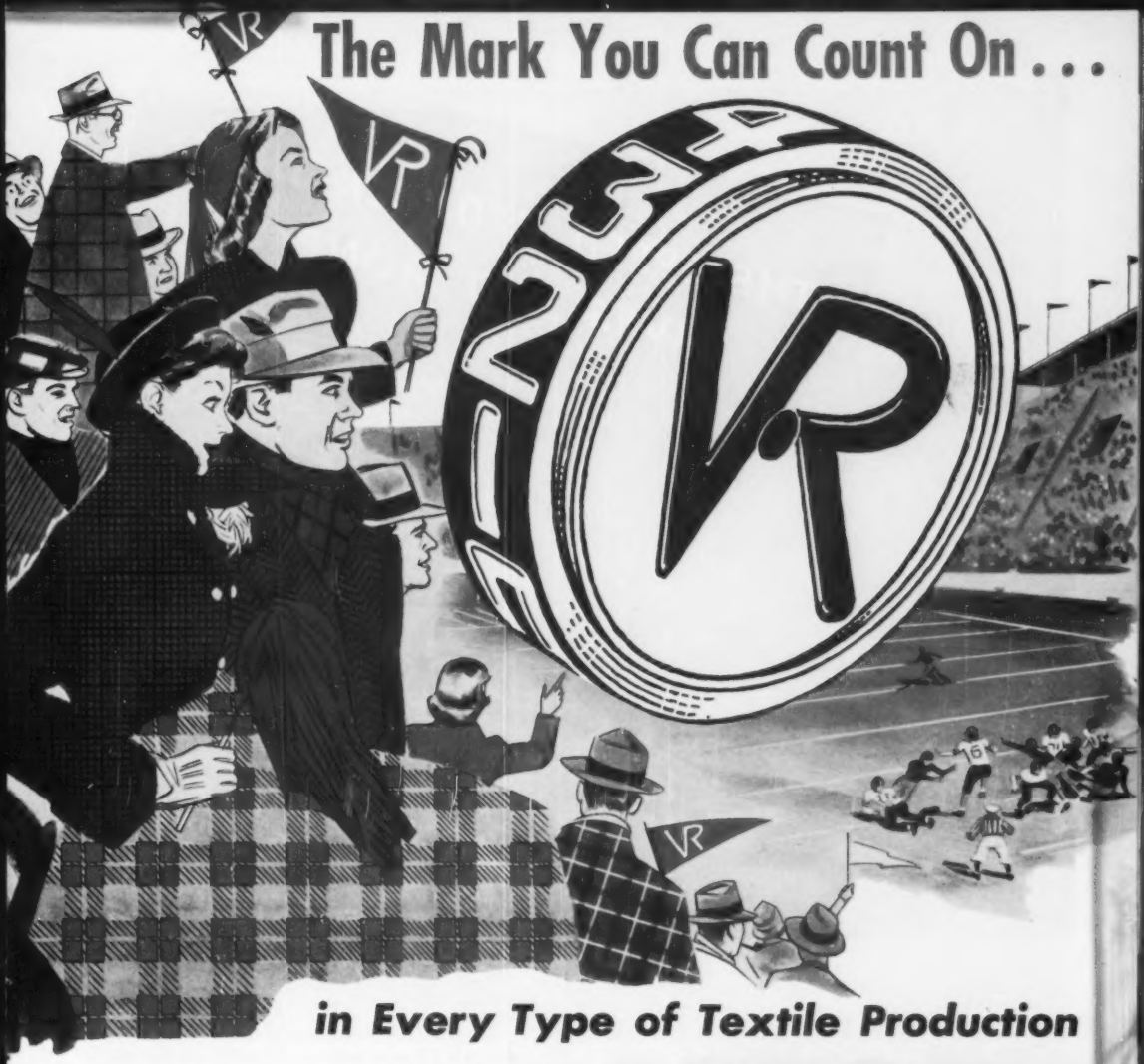

in Every Type of Textile Production

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This new V-R trademark is the buy-sign that stands for *"The Name That Counts"* . . . VEEDER-ROOT. Call the nearest V-R office for anything you need in the line of textile counters . . . or any other counting problem.

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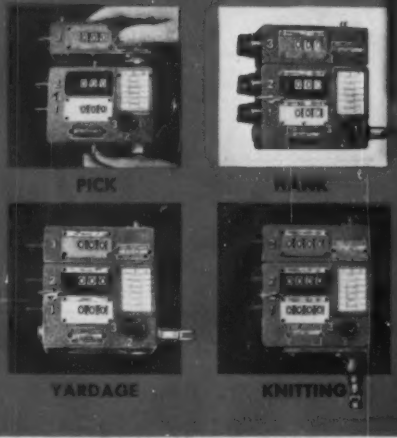
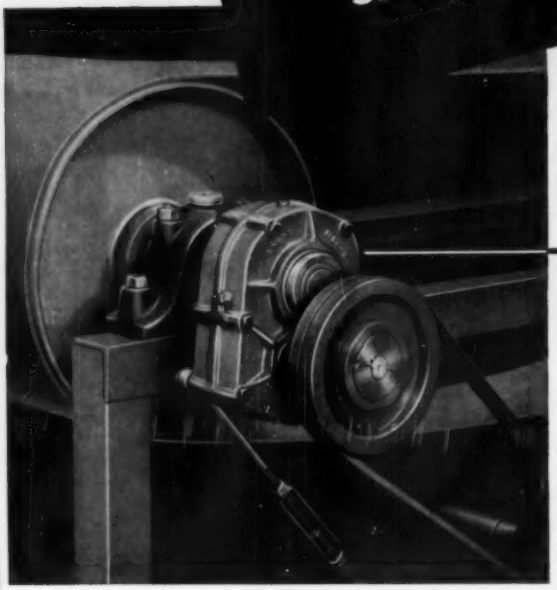
A Complete Line of
VEEDER-ROOT 2-3 COUNTERS



THE SPEED REDUCER THAT SAVES YOU MONEY!



Dodge

Torque-Arm

America's Most Complete Line of Shaft-Mounted Speed Reducers

- No special engineering required. No foundation to provide. No flexible couplings. No sliding base. No "lining-up" difficulties. No expensive installation. Stock TAPER-LOCK sheaves prescribed for each job to provide desired speeds. Application to other machines is practical and easy.
- Unit is driven through any V-Belt Drive. Torque-arm, fastened to any fixed object, anchors the reducer unit. Turnbuckle provides fast and accurate adjustment of belt tension.
- Backstop available from stock when required. Simple. Positive. Easily installed. Sealed inside the reducer housing.
- Compact, light weight, *rugged*. Quality built by Dodge for Dodge *dependable* service.
- Built in two series—Single and Double Reduction. Capacities from 1 to 27 h. p. Speeds from 12 to 330 rpm. Available from distributors' stocks.
- WRITE for special bulletin A602.

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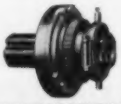
CALL THE TRANSMISSIONEER, your local Dodge Distributor. Factory trained by Dodge, he can give you valuable assistance on new cost-saving methods. Look for his name under "Power Transmission Equipment" in classified phone book.

FIRST IN POWER TRANSMISSION MACHINERY!

V-BELTS AND TAPER-LOCK SHEAVES

DODGE-TIMKEN PILLOW BLOCKS



ROLLING GRIP AND DIAMOND D CLUTCHES

SOLID STEEL CONVEYOR PULLEYS

AROUND THE CLOCK AROUND THE CALENDAR

Westvaco CHEMICALS

FRIENDLY DEPENDABLE SERVICE ON HIGH QUALITY ALKALIS

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Liquid 50%, Standard and Dayton Grades
Liquid 70-73%, Standard Grade
Flake and Solid, 76% Na₂O

CAUSTIC POTASH

Liquid 45%, Flake and Solid*

NATURAL SODA ASH

Light and Dense

We pioneered the production of electrolytic Caustic Soda away back in 1904 . . . now are a major producer with growing output of all three principal alkalis.

But today—as always—each customer's monthly requirements are still a matter of continuous concern in the "corner offices." When you deal with Westvaco, you do business with men who can give you a prompt "Yes or No" on any alkali question.

If we aren't furnishing a fair share of your requirements, we will welcome a chance to talk things over with you.

*Liquid 50% also available, shipped in tank cars only.

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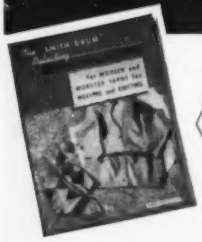
ONLY *Relaxed* YARN

RETAINS ITS FULL RESILIENCE AND FLUFFY APPEARANCE!

That's the *BIG IDEA* of this

SMITH-DRUM
Pulsating Skein Dyeing Machine

This machine introduces the "pulsating flow" principle of dyeing woolen and worsted yarn in skeins. The flow is in the "downward" direction only and the yarn is permitted to *relax* at regular intervals during the dyeing process. As a result, the yarn is not subject to continuous tension or stretch. The strands of the skein remain completely free and the fibers of each individual strand retain their full life and resilience. Yarn dyed in The SMITH-DRUM Pulsating Machine is actually *improved* in both appearance and feel. Better winding qualities of the dyed yarn and uniform dyeing with level shades . . . combined with economy and versatility . . . are among other important advantages you cannot afford to ignore.



Catalog No. PSD-806 contains complete details of operation. Write for your free copy.

SMITH, DRUM & CO.

ALLEGHENY AVENUE BELOW 5TH STREET
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Frankly, we don't know what uses there are for the "Utiliscope" (Wired Television) in the textile industry . . . so in the adjacent ad we are simply telling you what it will do. Based on our experience in other fields, we suspect there are many places in the textile industry where the "Utiliscope" will improve product quality, save manpower, prevent accidents or help increase production.

If you want to look into the possibilities of the "Utiliscope", simply write us for a copy of Bulletin 1025L which explains the equipment and shows various applications. Please address your request to Department "L".

DIAMOND POWER SPECIALTY CORPORATION
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The DIAMOND "UTILISCOPE"

Wired Television

is now

Saving Labor · Increasing Sales
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for others

what can it do for YOU?

The Diamond "Utiliscope" is television which transmits by wire instead of by broadcast. It will provide a faithful and instantaneous reproduction at a distance of any scene, action, demonstration, or operation. It can look into furnaces, observe explosions or other dangerous operations without hazard to the operator.

Corners, walls, and other obstructions are no obstacle to the "Utiliscope." The image is clear and unmistakable, and as 60 individual image fields are transmitted each second (sound movies have only 48), every movement before the camera is transmitted accurately with no measurable time delay.

If you have any operation which needs to be seen close up, but which is too dangerous, inaccessible, costly, or inconvenient to be watched in person, you need the "Utiliscope." If it is to your advantage to show a demonstration, display, or other scene to a large number of people at a distance, the "Utiliscope" will do it.

The "Utiliscope" is not costly . . . has exceptional stability and reliability . . . requires no special skill for installation and operation. Write for Bulletin 1025 describing the "Utiliscope" and suggesting some of its many uses.

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TYPICAL USES—*Studying destructive tests of engines • Watching flow of molten steel • Checking remote gauge readings • Observing conditions inside furnaces • Viewing nuclear research • Coordinating materials flow on conveyors*

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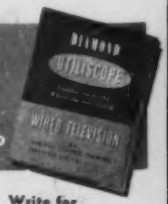

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Of course! Tycol Armitage Bearing Grease "stays put" ... keeps anti-friction bearings running smooth and cool. Its high stability makes it suitable for sealed anti-friction bearings that must last the life of the equipment. Tycol Armitage possesses exceptional resistance to oxidation.

The dependable lubricating ability of this quality grease lengthens bearing life and cuts down maintenance costs. Call your nearest Tide Water Associated office for further information.

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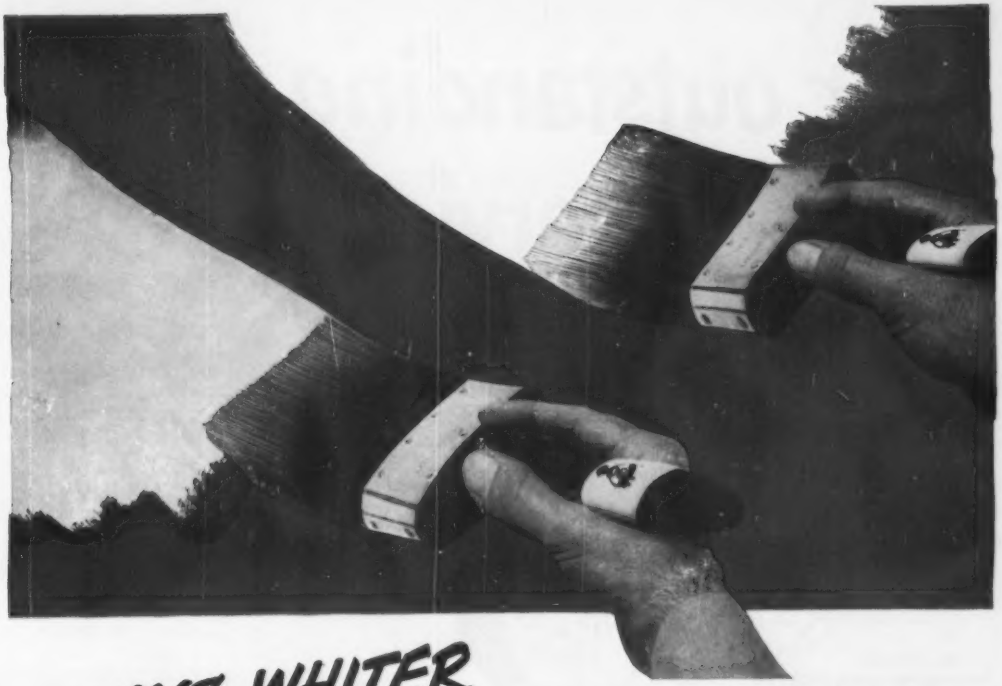

STAYS WHITER because it STARTS WHITER!

INTERIOR SURFACES STAY CLEANER . . LONGER
. . WITH KEM SAVE-LITE . . THE WHITER WHITE!

How long white paint *stays* white—and *how* white it stays—depends, in part, on *how white it is to start with.*

Sherwin-Williams KEM SAVE-LITE Finishes for mill interiors cut upkeep costs because their brilliant whiteness both starts higher and stays higher in light reflection value. These facts are borne out not only in laboratory tests, but in year-after-year experience in leading textile mills the country over.

Test KEM SAVE-LITE for yourself against any conventional mill white finish. See the difference—in initial whiteness—in hiding power—in greater covering capacity. Call your Sherwin-Williams representative for a demonstration, or write The Sherwin-Williams Co., Cleveland 1, Ohio. (Division offices, Charlotte, N. C. and Boston, Mass.)

Types to Meet Varying Requirements

Sherwin-Williams Save-Lite is supplied in several types to meet varying operating conditions, both in oil type (Save-Lite) and synthetic (Kem Save-Lite). Gloss finish gives extreme ease of cleaning; Eg-Shel greatest diffusion and reflection of light. Fume and moisture-resisting types give added resistance where chemical fumes, moisture and heat are encountered.

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INDUSTRIAL MAINTENANCE FINISHES

SAVE-LITE MILL WHITE • COLOR HARMONY FINISHES
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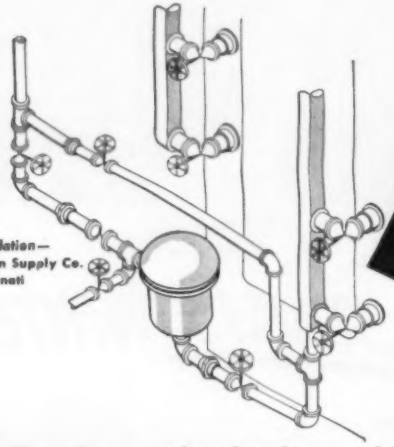
for outstanding service

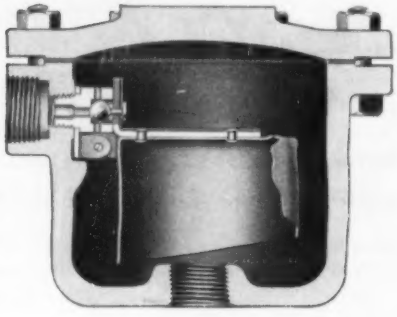
on Heavy-Duty Steam Drying Units

...for example



The installation—
American Linen Supply Co.
Cincinnati

Rely on Dependable CRANE STEAM TRAPS



Crane Inverted Open Float Steam Trap with patented ball-type disc, for 1 to 300 pounds saturated steam working pressures. Literature on request from your Crane Branch or Crane Wholesaler.

PROBLEM: To equip a steam-heated tumbler-type drier with a trap that would reduce start-up time to a minimum, and provide, automatically, a smooth, steady flow of hot, dry steam to the unit, with the lowest possible maintenance cost.

WORKING CONDITIONS: Steam pressure to drier, 125 pounds. Drier operated 16 hours daily on continuous batch basis.

SOLUTION TO PROBLEM: Crane No. 981, ¾-inch, 150-Pound Inverted Open Float Trap, carefully selected for adequate drainage capacity, and properly installed. (Now listed as No. 9810, with patented improved ball-type disc.)

RESULTS: Never requiring any repairs or new parts in more than 8 years' service, this Crane trap has given complete satisfaction. Periodic routine inspection only is total maintenance cost.

... ANOTHER TYPICAL CASE HISTORY demonstrating the better performance ... the lower ultimate cost of Crane Valves of all types ... and why—
More Crane Valves are used than any other make!

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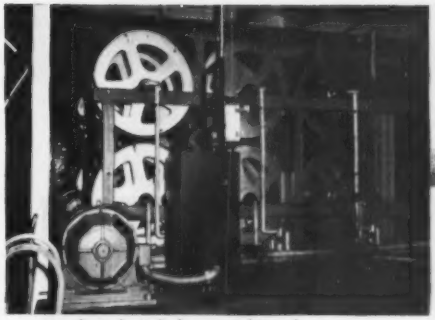
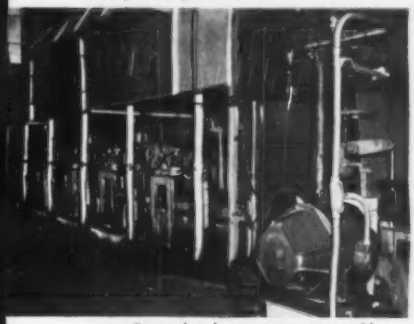
Have you a range-drive problem?

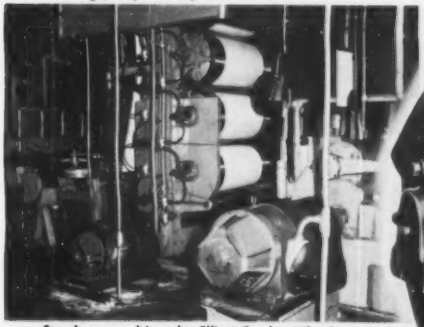
Capitalize on the years of successful experience in textile applications of ELLIOTT CROCKER-WHEELER



● Steam-heated dry cans driven by Eliott Crocker-Wheeler 40-50 hp, 400-1600 rpm, constant-voltage, adjustable-speed motors.



● Dye pad and open soaper range with steamer. Driven by Elliott Crocker-Wheeler 15-20 hp, 400-1600 rpm, constant-voltage, adjustable-speed motor.



● Starch range driven by Elliott Crocker-Wheeler four-motor range drive. All motors are drip-proof, dye-house insulated, adjustable speed, constant voltage, geared or V-belt drives.

COMPLETELY ENGINEERED RANGE DRIVES, including range drive motors, gear motors, motor-generators, and controls. Elliott Crocker-Wheeler D C Motors, widely used in this service, are available in any type of enclosure, with special dye-house insulation immune to moisture and caustic fumes.

Elliott Crocker-Wheeler range drives such as those shown here are typical. Write us for descriptive bulletins on this equipment. If you have a range drive problem talk it over with an experienced Elliott Crocker-Wheeler engineer. No obligation.

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CROCKER-WHEELER DIVISION

AMPERE, N. J.

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ELLIOTT Approved SERVICE SHOPS COVER THE COUNTRY

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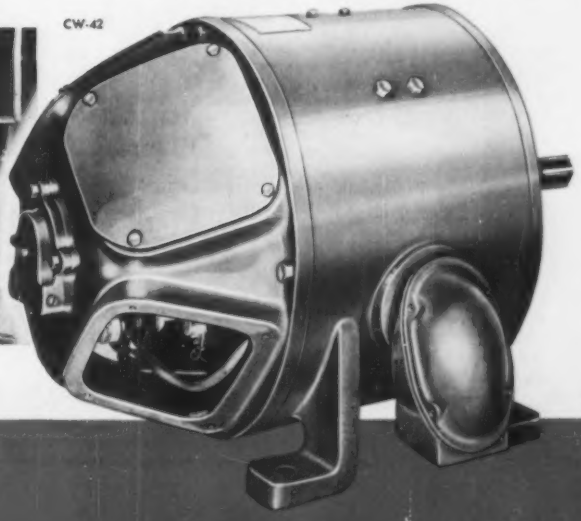


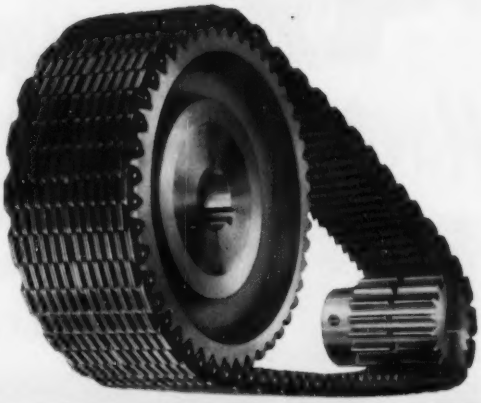
Whitney Silent Chain Drives

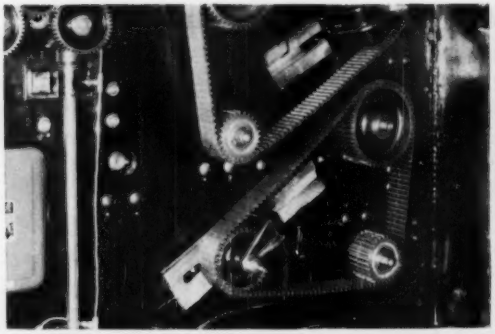
Reduce

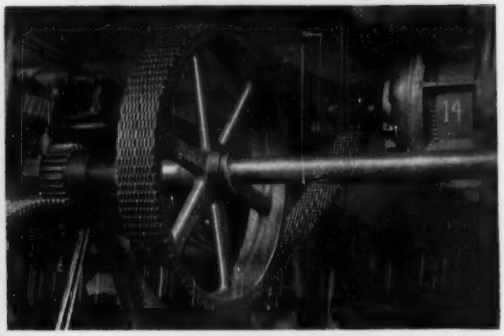
Power Transmission Costs,

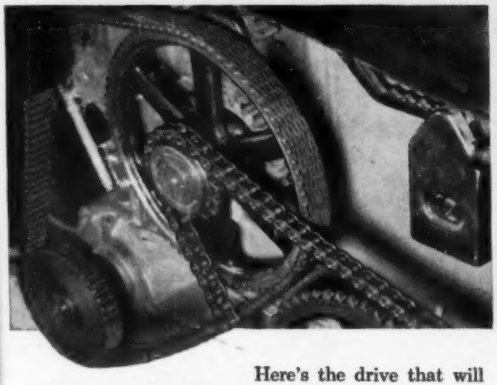
Increase

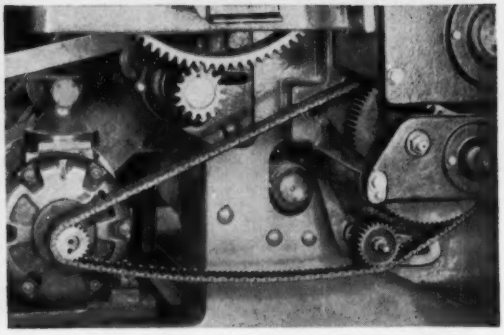
Production in All Types of Textile Equipment











Here's the drive that will increase output from your equipment and provide important cost reductions as well.

Those are two good reasons why you will find Whitney Chain Drives as "standard" on such textile equipment as hosiery machines, slashers, cards, looms and printing presses.

Whitney Chains — the *all-steel* drives deliver full rated power, smoothly and dependably. Their positive grip transmits constant speeds, assuring product uniformity. They are easily and quickly installed — saving costly down time. And Whitney's alloy steel construction assures long, trouble-free service life with minimum maintenance.

Add to these operating advantages the Whitney *flexibility* in meeting drive problems and you, too, will specify and use Whitney Chain Drives as *"standard"*.

Consult your local Whitney Field Office or Distributor, or write direct to us for complete information and catalog.

Whitney Chain Company

211 Hamilton Street, Hartford, Connecticut

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... a great name in the
precision machine tool field!

Ex-Cell-O has been making precision parts to customers' specifications for close to 30 years. Today, these Ex-Cell-O products include parts for the textile industry . . . from spindles and various small parts to large assemblies. Ex-Cell-O has the facilities—machines, heat treat, assembly, and inspection—to produce your precision parts economically, in small or large volume, and in accordance with your delivery schedule. For a quotation, send a part blueprint to Ex-Cell-O Corporation in Detroit today.

Bulletin No. 26181 describes Ex-Cell-O's textile products. Write now for your free copy.

EX-CELL-O CORPORATION DETROIT 32

XLO
EX-CELL-O PRECISION

so Gentle..

to even Finest Fabrics

Even the sheerest, most delicate materials are safe in the Fletcher "Whirlwind". Its mirror-smooth stainless steel basket interior has no rivets, flanges or other projections to harm or snag the contents. The absence of reinforcing bands provides maximum drainage, reduces windage and power consumption. Large outlets speed removal of liquids.

For full details . . . send for Bulletin 53.

Fletcher "WHIRLWIND" EXTRACTOR

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BOTTLE OILER
FIGURE 1815

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STRETCH PLANT CAPACITY

★

CUT MAN-HOURS OF MAINTENANCE

★

REDUCE SAFETY HAZARDS

Your goal is fast, quality production. You install the best machinery and hire crack technicians. *Protect that investment* . . . keep your machinery humming at peak efficiency — with Lunkenheimer engineering devices.

Install Lunkenheimer Bottle Oilers at bearing points that are hard to reach and often neglected. Bottle Oilers *require less upkeep* and *cut accidents 'way down* on loom and card bearings in textile mills . . . on roller and fan shaft bearings of paper-making machines . . . in *every* plant where machinery moves. Pumps and all types of lubricators reduce costly maintenance shutdowns and eliminate the dangerous practice of hand-oiling moving machinery.

Don't overlook Lunkenheimer's *complete* line of engineering devices — pop-safety and blow-off valves, water gauges and gauge cocks, fusible plugs, lubricators for compressor and pump cylinders, and oil and grease cups. Get together with your Lunkenheimer distributor. He'll be glad to show how Lunkenheimer engineering devices will boost your output, cut accidents, and protect your overworked—and irreplaceable—machinery.

Write today for Circular 580 — the new bulletin describing Lunkenheimer Bottle Oilers, Oil Cups, and Constant Level Oil Controls. Address: The Lunkenheimer Co., Box 360R. Cincinnati 14, Ohio.

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THE ONE *Great* NAME IN VALVES

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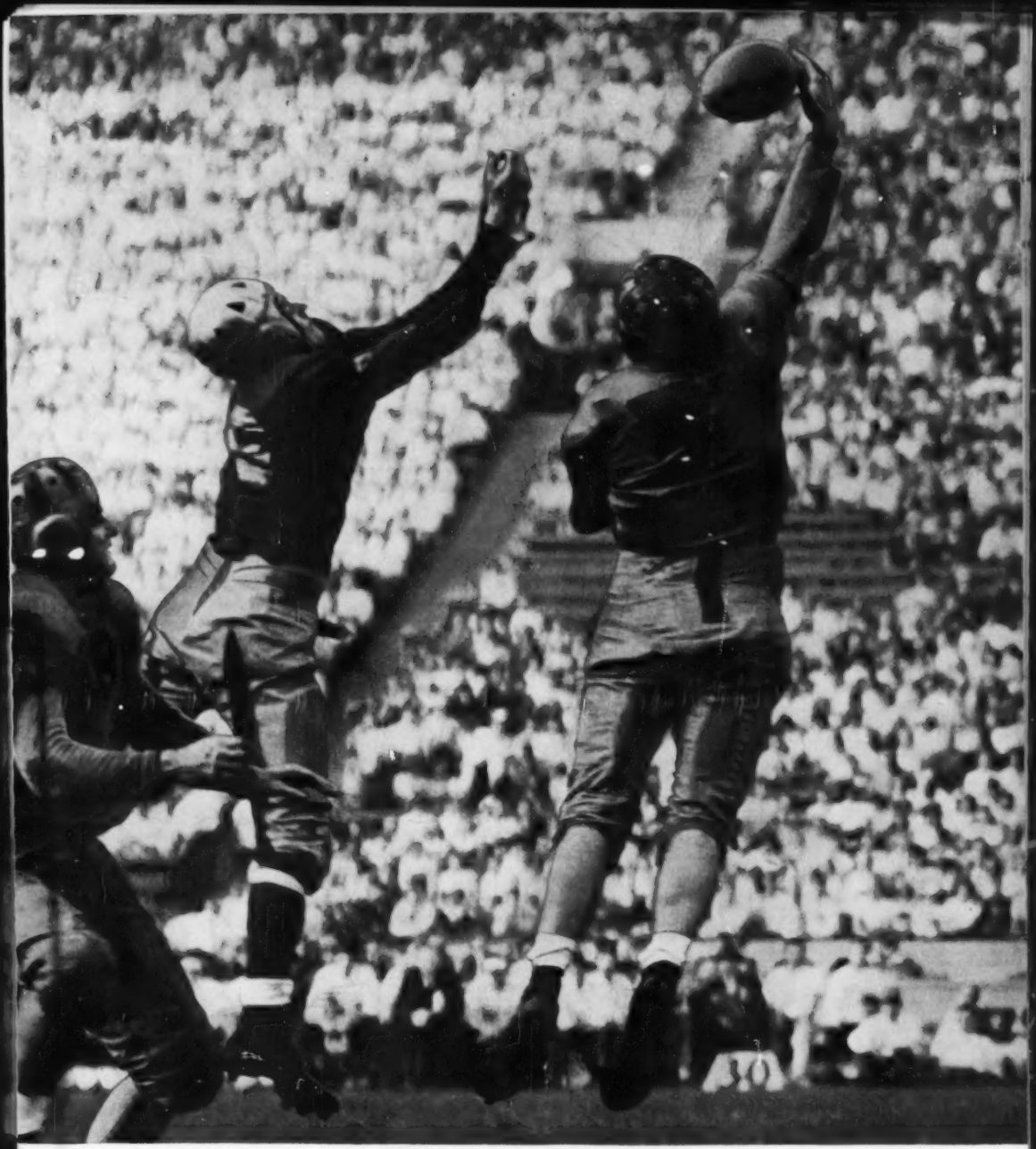


He's a great End—

Don Hutson was the outstanding end in the National Professional League from 1935 to 1946. He caught 489 forward passes for a gain of 8,010 yards and scored 101 touchdowns. He was an All-American end at Alabama University in 1934.

BUT how does he compare with Hutson? . . . In everything we do, we make comparisons . . . In Full-Fashioned Knitting, the one standard for comparison is the 30-section "Reading" Machine with a production of 14 to 16 dozen pairs of superior quality stockings in 8 hours. 51-gauge, 60-gauge.

TEXTILE MACHINE WORKS • READING, PENNA.

Will Defense Production Be Caught in the Squeeze?

When Congress revised and extended the Defense Production Act, it relaxed a squeeze on business profits.

President Truman asserted that this action by Congress cripples the government in its effort to prevent inflation which, as he puts it, could lead to "enrichment and profiteering for the few, economic hardship and misery for the many."

He asked Congress to rescind its action.

This editorial—the second on problems presented by "escalator"clauses—aims to throw some light on this conflict of opinion.

The Squeeze

The squeeze on profits was imposed in the name of price stabilization. The idea behind it was simple. The *selling prices* of industrial products were to be held under a tight lid. But many industrial costs are affected by "escalator" clauses of one kind or another which tend to boost production *costs*. Thus, with rising costs and fixed prices, profits would be squeezed and much of the cost of defense would thereby be shifted from those favored by escalator clauses to business concerns.

The mechanics of this squeeze on profits were complicated. But here, in brief, is how it was to work. The first step was to require manufacturers to set ceiling prices, effective May 28, for their products.

These ceiling or maximum prices were to allow for increases in manufacturers' costs that had occurred since Korea. *But they did not allow for all increases.* Manufacturers, for example, could not include increases in indirect costs—office or selling costs. Neither could they, in calculating their new prices, include increases in the costs of materials or direct labor that had come after March 15. This was the first phase of the squeeze on profits.

The second phase was prepared by **not** putting a ceiling on costs. The Wage Stabilization Board said it could not disturb the operation of "escalator" clauses by which wage rates are geared to the cost of living. Moreover, nothing could be done to curb the operation of the farmers' "escalator" clause, the farm parity arrangement. Under it, the federal government underwrites higher prices for farm products to match increases in the cost of things farmers buy. So this left wages and many materials costs free to rise against a ceiling imposed on the prices of what industry has to sell.

Relief—at a Loss

On two conditions only would the Office of Price Stabilization permit a company to raise its prices and escape this squeeze. One of these was that increased costs had more than wiped out its profits; in other words, that it was operating at a loss. The other condition was

that the industry of which the company is a part was not, as a whole, making "excess profits." That is, the industry, as a whole, could not get price relief if its overall profits before taxes were greater than 85 percent of its average profits during the best three of the four years from 1946 through 1949. Many companies expected that their profits would be cut drastically before they could get through this narrow escape hatch.

When this squeeze on profits was set up, we were told that industry as a whole was reporting record profits. But, it was equally true that wage rates and farm prices also were at record high levels. And it was also true that, under the impact of rising taxes and the dislocations caused by the defense mobilization program, profits actually were on the way down.

Profits—Going Down

By the time Congress acted to relax the squeeze, corporate profits, after taxes, were running at a rate 20 percent lower than they had been six months before. And the clear prospect was that they would continue to decline.

So the issue put up to Congress was simply this. Should business firms stand so much of the brunt of the defense costs while "escalator" clauses continued to exempt organized workers and farmers from paying their share of those costs?

But this question actually is much broader than one of fairness or unfairness alone. One certain effect of such a squeeze on profits would be to undercut the capacity of private industry to install the new plants and equipment needed for our mobilization effort. Today—unlike World War II—private industry is financing almost all of our huge program to expand production. And about two-thirds of the money that has been plowed into the expansion and improvement of our industrial machine since World War II has come out of profits.

In view of all this, Congress decided last summer to relax the pressure on profits. This was done by the controversial Capehart Amendment to the Defense Production Act. This amendment has serious administrative weaknesses. But some measure with the same purpose is needed to maintain profits at a high enough level to finance the huge and continuing expansion of our industrial machine that is now underway.

Basic Issues

As soon as the amendment was enacted, the President asked Congress to revise the law again. The heart of his proposal was to restore to the Administration the powers it used last spring to arrange the squeeze on profits outlined here.

This controversy will continue. There can be no final answer to it as long as we have the economic controls made necessary by mobilization.

But if we look beneath the surface of this technically complicated controversy, we shall see clearly that the basic issues are:

1. Whether we really shall make an effort to distribute fairly the burdens of inflation caused by our defense mobilization—

2. Whether farmers and organized workers should be exempted from these sacrifices by escalator clauses—at the expense of the nation as a whole—

3. Whether profits should be squeezed still more—at the risk of putting a fatal squeeze on the effort of industry to build new plants and install new tools. These new facilities are essential to maintaining American living standards—and they are the heart of our ability to defend ourselves and the rest of the free world.

Americans face no more important economic issues at this time.

McGraw-Hill Publishing Company, Inc.

☆ Annual Mill Checkup Number ☆

TEXTILE WORLD *Presents—*

☆ AN ANALYSIS OF MILL-MODERNIZATION EXPENDITURES

☆ A REVIEW OF NEW TEXTILE MACHINERY, EQUIPMENT, AND SUPPLIES ANNOUNCED IN THE PAST 12 MONTHS

This issue of TEXTILE WORLD editorially is divided into two parts. First, on the next two pages you will find our annual analysis of American textile-mill expenditures and commitments for the current year. Second, on the balance of the editorial pages you will find condensed and neatly arranged descriptions of the major textile equipment offered to American mills during the current year.

☆ All live-wire mill men know that to stay ahead of competition today a mill has constantly to spend money for new equipment and methods. The old adage about "you have to spend money to make money" seems truer in 1951 than ever, especially in an industry that is expanding and changing as rapidly as the American textile industry.

U. S. mills in 1951 have set aside $746,200,000 for plant improvements and expansion. This record over-all annual figure is broken down in detail in the story starting on the next page.

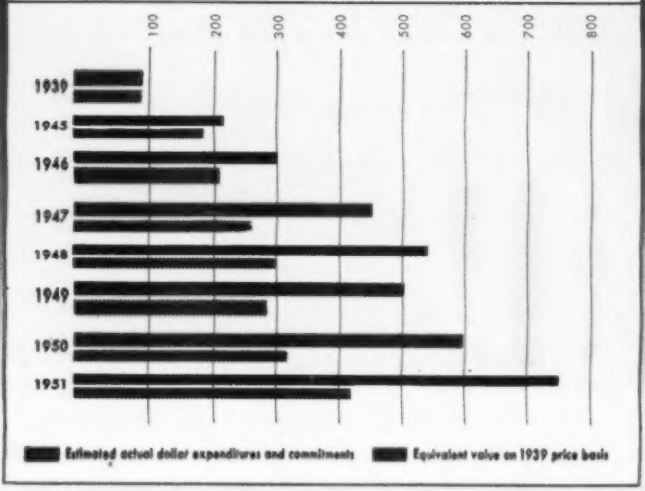
☆ What is also important to a mill man today is to know what new processes and types of equipment are being developed by machinery manufacturers and suppliers and how they stack up, one against the other, productionwise and costwise.

Thus, the balance of the editorial-feature content this month is a bird's-eye view of the whole new-equipment field of 1951. A reference index by processes is given for reader convenience on page 113.

How much *new* equipment does your mill need?

☆ *Total* TEXTILE INDUSTRY EXPENDITURES AND COMMITMENTS

(In millions of dollars)



☆ *Index* NUMBERS ON TEXTILE MACHINERY AND INDUSTRIAL BUILDING COSTS

(1926 = 100)

TEXTILE MACHINERY

1939	83.7
1945	101.8
1946	122.1
1947	146.6
1948	157.4
1949	159.0
1950	170.5
1951	189.0

MILL BUILDINGS

1939	99
1945	133
1946	155
1947	182
1948	199
1949	196
1950	214
1951	229

(Compiled by Marshall & Stevens, Chicago, Ill.)

MILL MODERNIZATION *Speeds Up As Lower Unit Costs Are Sought*

☆ $746,200,000 spent or committed during 1951 to increase production and to improve individual mills' competitive positions

☆ Rapid-amortization programs of the government make financial risks involved less hazardous to those anxious to expand

☆ Trend is to new plants and locations in the South rather than the refurbishing of processing units in older established areas

☆ 53.9c dollar brings actual equipment value, compared with 1939, down to 4 instead of 7½ times that of prewar

☆ 1951 may be the "peak year" as industrial-materials cut-backs may in 1952 temporarily slow down natural continued growth

By **RICHARD C. SCOTT,** *New York Editor,* TEXTILE WORLD

A RECORD $746,200,000 will have been spent on or committed to American textile-mill modernization from January first to the end of December, 1951. This ¾-billion-dollar figure is almost one-third higher than the $565,000,000 figure established for the year 1950.

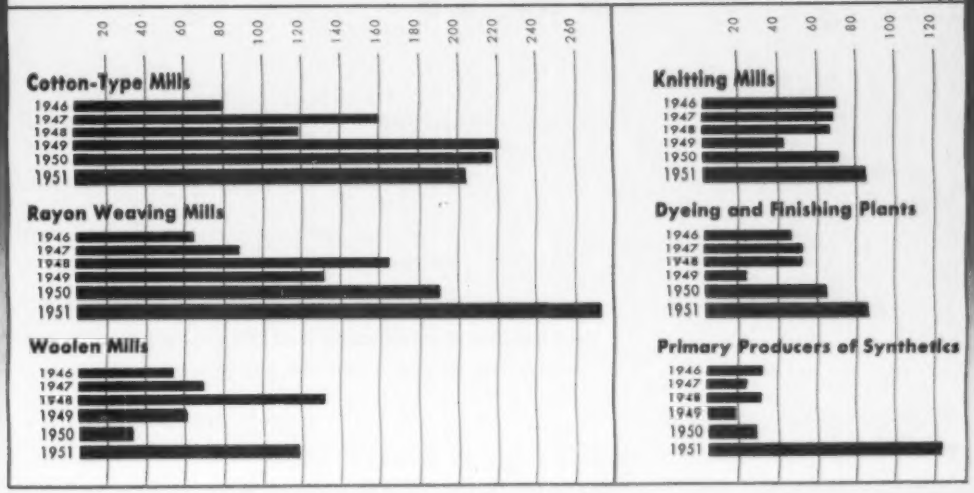
Various factors entered the 1951 expenditure-and-commitments scene that were not emphasized so heavily in the 1950 picture.

1. Many mills were able to expand because of an on-again off-again governmental rapid-amortization program carried on during much of 1951. Amortization tax allowances were rightly seen by mill men as capital-equipment-expansion green lights in the long-term defense program now in full swing.

2. Unyielding tax, power, and wage-rate loads in older established textile

☆ *Distribution,* BY TYPE OF MILL, OF IMPROVEMENT EXPENDITURES AND COMMITMENTS MADE SINCE THE END OF WORLD WAR II

(In millions of dollars)



communities made new plants in new localities attractive to the whole industry—cotton weavers, woolen and worsted mills, synthetic-fiber processors, knitters, dyers, and finishers alike. And rapid-amortization clauses certified by the National Production Authority made possible the establishment of several such decentralized expansions.

3. Military purchases of textiles during the year were heavy enough to keep a majority of mills, except perhaps filament-rayon weavers and some New England mills, running fairly evenly even during the slowed-down last half of the year. With production maintained in many cases in spite of consumer price resistance and the accumulating of some inventories in warehouses again, mills were, in many cases, able to weather the slowdown through government orders. And hand in hand with mill activity, equipment replacement went along as scheduled.

4. Reduced allocations of steel, brass, and aluminum to textile-machinery manufacturers were seen to affect fourth-quarter deliveries of heavy equipment to mills, but were not instituted in time to affect third-quarter deliveries to a great degree. CMP allocations will undoubtedly affect 1952 textile expenditures and commitments more than they did those of 1951.

In any case, 1951 delivery reductions because of CMP have not been included in this survey, as this is an annual report on expenditures and commitments both, not one of actual deliveries of equipment.

How This Survey Works

For several years TEXTILE WORLD has presented its findings on mill-expansion trends in charts and graphs such as appear on these pages. Data are summarized from the 12 previous months' news items that have appeared in the department known as "News About Mills." These data, coming in unceasingly from our many correspondents in the field, are classified as to type of mill both for reader convenience and for making the compilation of this November report more informative.

Adding up all the dollar figures quoted in "News About Mills" for 12 months does not give the full picture. In the first place, many more items about mill modernization and construction are received by TEXTILE WORLD than there is space to publish them in each month. Many dollar values given in mill-news items coming in to us thus never reach our readers' eyes and permanent recording.

Second, there are always a number of mill-news items that do not include a dollar figure for the amount expended or to be expended in an expansion or replacement situation. Over the years, through a formula that has appeared to work well so far, these unknown dollar quantities are estimated and carried into the actually known dollar figure to make up a "grand total." And so for comparative purposes, because the system has been the same year after year, the general over-all figures appear to be valid for all practical purposes.

(*Continued on page 328*)

☆ **Statisticians say our 1951 dollar is worth only about 53.9% of the 1939 dollar. Thus, almost half of our money value has "gone with the wind," paying in an insidious manner for wars and other human follies.**

But textile manufacturers as a group are rightly hedging these days against the unknown future by pouring in and planning to pour in an ever increasing number of millions of dollars into new plants and equipment. Only by such action can real equipment values and manufacturing potentialities remain on an even keel and stay liquid. At the same time, all-important competitive positions are being maintained or established by those willing to go ahead.

In an era of ever-rising costs, linked with potential metal scarcities next year, no other industrial position appears tenable to those raised in the American tradition of high wages, mass production, and wide distribution.

A Year of NEW EQUIP

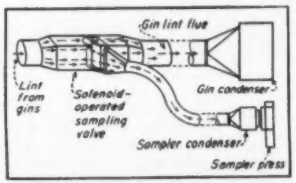
- Many advances made in simplicity of design, speed of output, and economy of operation
- Second annual review of equipment available is presented upon a 5-to-1 request preference from TW readers
- Trend of ever more automatic and efficient equipment continues as mounting labor costs continue to plague mills

For YARN PREPARATION

Cotton Samples Made at the Gin

A mechanical cotton sampler that automatically collects lint during ginning and packages a cross-section of the bale into a true sample has been developed by the U. S. Dept. of Agriculture at the Production & Marketing Administration Laboratory, Stoneville, Miss. The sample contains small amounts taken at six intervals during the ginning of a bale. Later cutting of samples is said to be eliminated.

Mixed qualities in a bale can be detected from the new sample before the bale is opened.



SMALL SAMPLES of cotton going into each bale during ginning are diverted, as shown, by a sampling valve into the sampler condenser. The cotton, blown to the condenser at six intervals during the ginning of a bale, is pressed into a sample for cotton classers to use in evaluating grade and staple.

Saco-Lowell Developing New-Type Cotton Opener

A new type of cotton opener, designed to beat out heavy impurities and to float out light impurities, is under development by Saco-Lowell Shops, 60 Batterymarch St., Boston, 10, Mass. Called the Trash Ejector, the machine uses four special beaters, one above the other. An adjustable cutoff is placed between each beater and between the inlet and the outlet.

The beaters have grids 45° above and 45° below the center. Dust bins are located on each side of the grids. Angle plates set close to the grids break up air currents and cause the dirt thrown out by the grids to fall away.

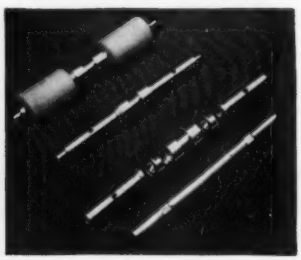
Beaters consist of six flat, radial blades. The blade is 3 in. deep on the retreating side.

Sheets of steel fill in between the blades to make the cylinder totally enclosed.

The trash ejector is to be fed through a No. 11 condenser that throws cotton into directly the inlet at the top of the machine.

Laps made on the new machine are said to show a decided change in color because more dust is removed. With the narrow, flat blades used in the trash ejector, there is said to be no tendency toward fiber curling.

Ball-Bearing Top Roll Has Six Moving Parts



A new ball-bearing top roll has been developed by Shuford Mills and now is being offered for sale through its subsidiary, Granite Machine Co., Granite Falls, N. C. Mill tests are said to show that two double-sealed Fafnir bearings will carry 200 lb. each at 200 rpm., or 400 lb. for each complete unit. There are only six parts to the roller.

TWO SEALED BALL BEARINGS are said to be able to carry a load of 200 lb. each.

MENT *for the Textile Industry*

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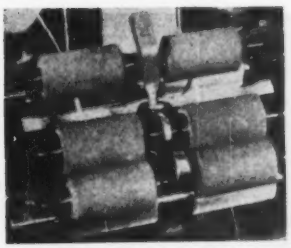


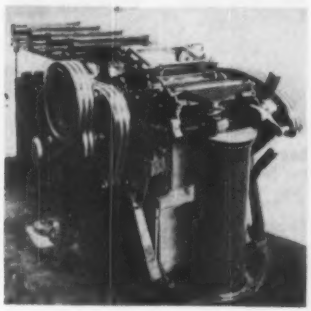
BACK-ROLL LUBRICATION is eliminated in the Shaw long-draft system by Saco-Lowell through use of nylon-plastic bearings in the saddle.

Nylon-Plastic Saddle Adopted by Saco-Lowell

Worked out in conjunction with engineers of Saco-Lowell shops, 60 Batterymarch St., Boston, Mass., a new Slixonice back saddle with nylon-plastic bearings has been designed by Dixon Lubricating Saddle Co., Bristol, R. I. The new saddle has been adopted as standard equipment on the Shaw long-draft spinning system by Saco-Lowell Shops.

The saddle substitutes long-lasting, low-friction, and easily replaceable nylon bearings for cast iron previously used. Back-roll lubrication is eliminated entirely, the manufacturers state.

Rectilinear Comb Designed for Synthetics

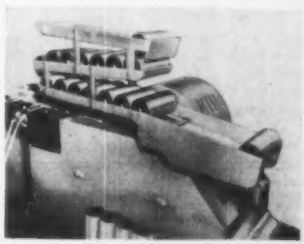


A new rectilinear comb for processing long-staple synthetics that has a new modified sword design to obtain a well-condensed regular web has been announced by Stellite American Corp., 60 E. 42nd St., New York 17, N. Y.

The comb is also equipped with a new adjustable, false-twist device said to produce a firm sliver. The comb is being built in 13- and 19-in. web width, and it can be supplied either with can creel or ball creel.

SYNTHETIC FIBERS from 1 to 8 in. in length can be processed on this rectilinear comb.

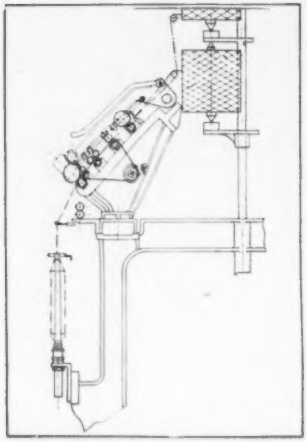
Device for Moistening Lap-Winder Spools



WRINKLING AND OVERLAPPING of sliver laps is said to be reduced with a new device developed by Saco-Lowell Shops, 60 Batterymarch St., Boston, Mass. The device consists of a magazine feed that automatically moistens a spool and places it within easy reach at the doff. A cloth wick does the actual moistening with water that contains a special setting agent.

Reduction in the percentage of waste made in lap winding is said to pay for the moistening device in a short time. The unit is easily applied to any lap winder and will be standard on all new 9- and 10½-in. machines.

Worsted Spring-Weighting System Gives Better Fiber Control



PRESSURE ON FEED and drafting rolls can be adjusted separately in this high-draft new spring-weighing system, and thus better fiber control can be maintained, it is claimed.

A new drafting assembly for worsted spinning frames, with a new spring-weighting device made by Isotta Fraschini, has been announced by Stellite American Corp., 60 E. 42nd St., New York 17, N. Y., U. S. representative.

The high-draft device has five rollers and a leather apron. The new, patented draft assembly permits adjustable pressure on the feed roll. Above the back roll, there are pressure rolls with a pivot mounted on ball or roller bearings similar to those placed above the draft roll.

The new device eliminates all levers and springs, or levers and weights.

The high draft is suitable for fibers from 1 to 8 in. in length or longer.

Advantages claimed for the spinning frame equipped with the new patented device are:

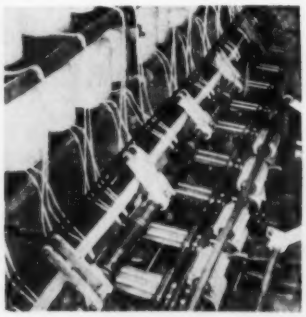
1. Work of the operators is facilitated.
2. Better control of the fibers during the drafting operations is provided.
3. Maintenance expenses are reduced.
4. Processing of slivers coming from any kind of drawing system is permitted.
5. Quick changes in drafting-roll settings can be easily handled.

NO AIR CURRENTS interfere with better action in this new opening and cleaning machine.

Cotton Opener Developed For Air-Free Cleaning

An air-free cleaner that uses mechanical and centrifugal force to open and clean cotton or other fibers has been announced by Thornbury Machine Works, Inc., P. O. Box 185, Dallas, N. C. Revolving beaters open and pass the stock over 225 vibrating, adjustable, non-choke grid bars. Centrifugal force and gravity open the stock and remove motes, sand, dust, leaf, fly, and other foreign matter.

Specifications of the cleaner are: width, 52 in.; length, 9 ft., 4 in.; height, 8 ft., 5 in.; weight, about 2,000 lb.



DRAFTS as high as 10 can be attained on this Superdraft porcupine drawing frame.

Superdraft Device For Porcupine Frames

A new Superdraft device for porcupine finishers has been developed by Textile Machines Isotta Fraschini S.P.A., Milano, represented in the U. S. and Canada by Stellite American Co., 60 E. 42nd St., New York 17.

The new device has an apron that supports and transports the sliver from the back rollers to the nearest point of the porcupines. Speeds up to 31 yd. per min. are claimed possible. One operator can run a 25-head, 50-bobbin machine.

Drafts can be up to 8 with short-staple fibers and up to 10 with longer fibers. Elimination of one or two passages of drawing is possible.

The Superdraft device can be easily and inexpensively attached to finisher porcupines.

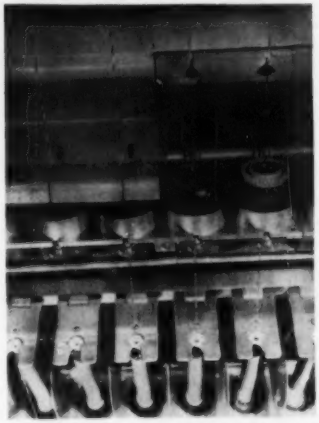
New Tandem-Unit Waste Machine

TWO OPENING ACTIONS take place on each cylinder of this new tandem waste machine. Each cylinder has two sets of feed rolls, one at the front and the other at the bottom.

A new tandem-cylinder waste machine for processing hard unsized waste of cotton, rayon, or wool has been introduced by Kirkman & Dixon Machine Shop & Foundry, Greenwood, S. C. The tandem application combines two or more units into a single housing, with only one feed apron and one delivery apron.

The two-unit tandem application has an over-all length, including a 5-ft. apron, of 16 ft. 3 in. The height is 52 in., width 30 in. at base, with a 60 in., cylinder shaft and the weight is approximately 5,000 lb. The two-unit tandem application is said to accomplish the same hard-waste processing as an ordinary four-cylinder waste machine. The machine is not designed to process sized waste.

Device Helps Evenness On Woolen Frames

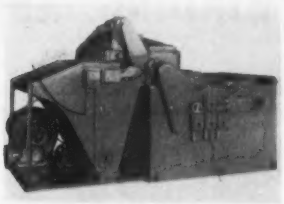


TWO SMALL ROLLS, which can deliver as well as rotate, are cased in this device. The element is set between the front rolls and the bobbin on a woolen ring-spinning frame.

A new twisting and delivery device for woolen ring spinning frames has been developed by Bremer-Spinnereimaschinenbau, G.m.b.H., Breme-Farge (Germany).

The device puts in and holds a temporary twist in the yarn between the delivery rolls and the bobbin.

Random-Web Machine Offers Waste By-Product Possibilities



A FEEDING UNIT (left) has been added to the random-web machine for handling a wide range of fibers and for delivering a uniform sheet, both lengthwise and crosswise, to the web-forming machine.

The model-40 Rand-Webber, an improved version of the random-web machine developed by Francis M. Buresh, is now available from Textile Div., Curlator Corp., Rochester, N. Y. An important improvement in the machine is the addition of a feeder, known as the Rando-Feeder, which provides uniformity of feed, both lengthwise and crosswise, and an ability to handle a wide range of low-cost, short-staple waste fibers in loose forms.

The Rando-Webber produces a random or non-oriented web suitable for processing into felt, wadding, heavy mats, or bonded-fiber webs on a continuous basis. A product having balanced physical properties is produced without the use of cross-laying devices. The machine presents possibilities of producing by-products from normal mill waste which are worth considering by any textile mill.

Webs weighing ½ oz. up to 8 oz. per sq. yd. are now produced on the 40-in. machine at capacities ranging up to 35 lb. per hr. A variable-speed drive on the condensing unit regulates the weight of the web. To produce webs or mats heavier than 8 oz. per sq. yd., webs can be laminated by mounting the required number of machines over a traveling conveyor in a manner similar to a wadding card line.

Animal-Protein Synthetic Has Wool-Like Composition

A new synthetic fiber, Merinova, is being produced from an animal-protein base by Snia Viscosa of Italy. The chemical composition is said to be almost identical with that of wool.

Some properties given by the manufacturer for the fiber are:

Elongation:
Dry: 50%
Wet: 60%

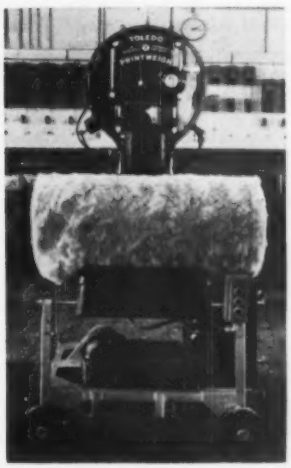
Resistance to
acids: Retains softness after boiling in 4% sulphuric acid. Can be carbonized.

Best results are obtained when Merinova is blended with other fibers. No difficulties are said to arise in spinning on cotton, woolen, or worsted machinery.

The fiber will not felt, but is said to assist felting when blended with wool.

Merinova can be bleached white like wool, preferably by using peroxide and Blankit I, a General Dyestuff Corp. product. The fiber can be dyed with all wool dyestuffs and with a few direct colors. In blends with cellulosic fibers or nylon, cross-dyed effects can be obtained. Merinova-blended fabrics can be treated with resin finishes.

Sizes being produced at present are 3 and 5 den., 1⅛, 2¼, and 4 in. U. S. agent is John J. Ryan, 25 Broad St., New York.



Powered Lap Scale Moves Along Picker Line

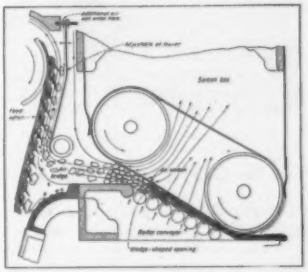
Why bring the lap to the scale when you can bring the scale to the picker? That's what you can do with this new automatic lap scale developed by the Toledo Scale Co., Toledo 12, Ohio. The scale moves along a track running in front of the pickers, and is controlled by a push button station either on the scale carriage or in a remote-control position on the pickers. The scale prints the weight of the laps on a paper tape and makes it possible to check on the number of off-weight and on-weight laps. A plate covers the scale-reading opening until the weight is recorded and thus prevents recording a false weight. Pilot lights indicate if lap is acceptable or is to be rejected.

CARTING LAPS TO SCALE for weighing is eliminated by this powered scale that moves along line of pickers on a track.

British Spinning Frame Has New Creel, Cylinder

A NEW CREEL, designed to prevent accumulation of lint and to permit easy accessibility, is one feature of a new spinning frame developed by Richard Threlfall Ltd., Bolton, England. The creel is also available separately. Another feature of the frame is a cylinder made of a bonded-fiber laminate said to run more quietly than a metal cylinder.

Feeder Unit Delivers Uniform Sheet of Fiber



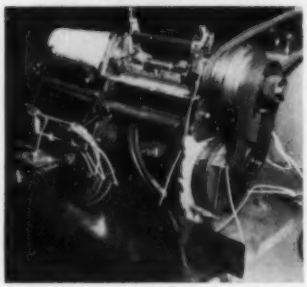
FIBER IS STRIPPED from the feed apron by an air current and deposited uniformly on the air screen which moves the web formed forward. If the sheet of fibers on the air screen is sufficiently dense, the air current is not sufficiently strong to continue to remove fibers from the apron, and they are automatically returned to the feeder hopper.

A new fiber feeder, the Rando-Feeder (designed primarily for use with the random-web machine described elsewhere on this page), that embodies new feeding principles applicable to processing of cotton or staple synthetic fibers, has been developed by Textile Div., Curlator Corp., Rochester, N. Y. The feeder produces a mat of fiber that is uniform both crosswise and lengthwise. The feed mat is formed and controlled to a close density tolerance. The feeder, if installed before

(Continued on page 214)

☆ *For* TWISTING, WARPING, WINDING, AND

Electro-Magnetic Drive Tugs at Yarn Tangles



A RELAY causes a shoe keyed to the cone-holder shaft to "bounce" back and forth between a rotating and a fixed member, causing a tugging at yarn snarls that is frequently sufficient to untangle them and thus reduce waste in winding.

A new drive capable of automatically nibbling at snarls and tangles in yarn without exceeding pre-determined tension may help to reduce waste in winding from cakes. The drive, which also may have various other textile applications, was developed by the Central Research Div., Eaton Mfg. Co., Cleveland, Ohio. It is an adaptation of Eaton's variable air-gap electro-magnetic clutch.

As applied to a winder, the winding shaft is keyed to a plate or shoe running between a stationary and rotating machine. When the magnet coil in the rotating member is excited, the plate or shoe keyed to the winding shaft is drawn magnetically toward it. As this attraction occurs, particles of powdered iron and graphite, which are between the surfaces, are trapped on the friction surfaces.

As the iron particles are "frozen solid" by the magnet, they link the two members and the winding shaft turns. When current is applied to the fixed member, the plate is linked to it, and the winding shaft is braked to a full stop almost instantly.

By means of a control setting, the drive can be adjusted so that the shaft-driving plate is braked as soon as tensions on the yarn exceeds the preset value.

The automatic nibbling on the yarn to untangle snarls is done by alternately activating the coils in the rotating member and the fixed member through a relay.

Tests reveal that this same action substantially reduces tension peaks in winding from an unsnarled cake, thereby producing a more uniformly dyeable yarn.

The particles of iron and graphite between the plate and the coil-activated members automatically reface the clutch friction surfaces each time current is applied. The powdery nature of the iron-graphite mixture allows it to circulate freely in the air gap with no drag or creep. The graphite permits friction without wear, and extensive tests made by the company show that wear on the facings caused by the iron-graphite mixture is insignificant.

Two-for-One Spindle Adaptable to Up-Twisters

A new 2-for-1 spindle said to be adaptable to practically every make of up-twister for making crepe has been developed by C. Landolt & Co., Aurorastrasse 84, Zurich 7/32, Switzerland. Use of the spindle is said to double machine output without increasing yarn tension. Larger delivery bobbins are used, but power requirements are reduced.

The principle of double twisting consists of imparting two turns of twist for each revolution of the spindle. The delivery bobbin is stationary; only a small part of the spindle revolves at the given high speeds. The spindles are built to suit bobbins already in use unless preference is for larger ones. Since the delivery bobbin is stationary, large bobbins can be used on light machinery.

From the yarn-unwinding device, yarn is led up to the inlet eye, down through the center of the bobbin, and to the outside of the spindle. On the outside of the spindle the yarn forms a steady twisting balloon and is said to maintain constant tension on the yarn from initial unwinding to empty spool.

THE SPINDLE is quickly and easily disassembled for changing delivery packages. Larger bobbins may be used on the spindle as only the flyer and part of the spindle revolve.

Variable-Speed Drive Gives Constant Yarn Speed

LESS TIME in beaming is claimed as one advantage of this variable-speed beam or spool drive.

A new variable-speed drive for winding yarn on beams or spools has been announced by Sjostrom Machine Co., Lawrence, Mass.

This drive, called the Time-A-Trol, is said to produce a constant yarn speed and even tension. The beam is driven at first at a high speed, and speed is gradually reduced as the yarn builds up. Thus, the speed of the yarn is constant throughout the entire winding operation.

The machine has two variable-speed units, one acting upon the other. There is no contact on the yarn, and the operation of the machine is based on the time element required for various weights and types of yarn. For example, a heavy yarn will build up faster than a light yarn, and will therefore take less time to fill the beam.

Crepe Up-Twister Has Two-for-One Spindle

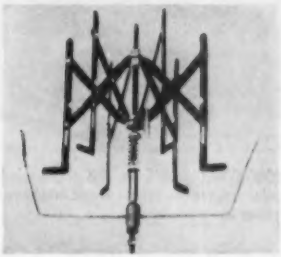
A new two-for-one twister said to be adaptable to practically any existing up-twister and which inserts up to 30,000 twists per min. has been developed by Parcofil Textile Machinery Makers, Ltd., Sirnach, Switzerland. The newly available machine is said to be suited to silk and rayon crepe, cotton, nylon, and Perlon.

The present spindle uses a stationary bobbin. The spindle carrying the bobbin is housed in a stationary metal container beneath which is a revolving disk. The spindle itself turns on roller bearings. The stationary part of the spindle that carries the delivery bobbin rests on the spindle by means of two ball bearings and is fixed by permanens magnets that prevent it from following the spindle rotation.

The yarn is drawn over-end from the stationary bobbin, descends through a hollow shaft in the spindle, and receives the first twist. As it leaves the spindle shaft, the yarn passes through a slit in a revolving disk that gives the second twist as the yarn passes into the balloon, up through the thread guides, to the winding bobbin.

SLASHING

Cake Holder and Flyer Increase Winding Production



TENSION OF THIS CAKE HOLDER can be adjusted. The holder can be contracted to be introduced quickly into a cake, and expansion is achieved by depressing a hardened trigger.

An expanding cake holder—together with a suitable flyer developed by Manchester Metal Works Ltd., 368 Bury New Rd., Salford 7, Manchester, England—is said to provide an average increase of 27½% in the poundage of yarn wound per week as compared to previous methods.

The increase in output is attributed to the rapid method by which the expanding holder can be closed, placed in a new cake, and opened up; the quick method by which the assembly can be mounted on the flyer; and the gentle unwinding action of the flyer which prevents every turn of the yarn being dragged over those adjacent to it. The latter feature is also said to result in a lower percentage of breaks.

The holder can be closed with one movement of the hand and is ready for further use immediately. The flyer is provided with a threaded portion at one end, 1 in. long, complete with nut, so that it may be mounted vertically, horizontally, or at an angle on wood or metal bars, by drilling a single hole.

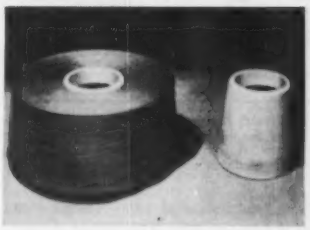
Novel Spindle Drive On British Twister

A new, high-speed, stop-motion ring twister developed by J. & T. Boyd Ltd., Shettleston, Glasgow, Scotland, has a method of driving spindles that is said to increase tape life considerably.

The tape passes around a normal driving cylinder, is tensioned by horizontal pulleys, and then passes around a vertical pulley. The upright pulley has live and dead sections. A secondary tape drives the spindle. A special arrangement allows the primary tape to run continuously.

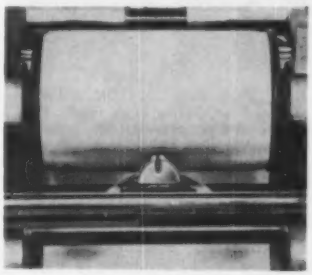
Tapes are at no time in contact with a stationary surface that might fray the tape edge.

Foster 102 Now Winds Cones for B-C Creel



SLIGHT-TAPER CONES to fit a Barber-Colman creel can now be wound on the model-102 winder by use of an attachment for the winder developed by Foster Machine Co., Westfield, Mass. Package-dyed yarns can be wound at speeds up to 715 yd. per min. with 4-in. traverse. The new equipment is said to be especially effective in handling fine-count yarns from 50s to 80s. The cone produced is 4 in. in diameter at the base and will hold up to 3 lb. of yarn.

Spooler Guide Has 1/32-in. Polished Slot



A NEW TRAVERSE THREAD GUIDE for the U. S. Acme high-speed spooler has been announced jointly by American Lava Corp., Chattanooga 5, Tenn., and U. S. Textile Machine Co., Scranton, Pa. The polished slot of this guide is 1/32 in. wide. It is said to assure accurate control at the end of the traverse, create a uniform wind, and result in a package of uniform weight.

Automatic Winder Has 10,000-Rpm. Speed

A DRUM on this winder guides yarn onto the bobbin. Build is controlled by a contact disk. Bobbin changing takes 1½ sec.

A new, fully automatic bobbin-winding machine said to have a spindle speed of 10,000 rpm. has been developed by Schlafhorst, Muenchen-Gladbach, Germany.

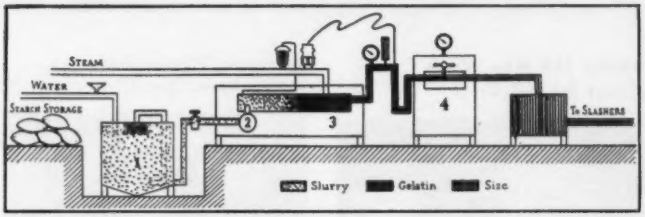
Yarn passes from the cone through a double tension device and a special guide connected to a rotary traverse. This traverse works on the grooved-drum principle.

When the bobbin is full, it is released and drops into a reception tray, where it is held until the empty bobbin has been inserted. Not until the new bobbin has started winding does the full bobbin drop into the main receptacle. Change mechanism is operated by independent cams.

Reduction in Creel Costs For Overseas Buyers

A new plan announced by Edward J. McBride Co., Philadelphia, Pa., manufacturers of warp-preparatory equipment and other textile machinery, will make McBride magazine creels available to overseas buyers at prices far below those previously existing. The creel framework has been designed, by McBride engineers, to utilize standard angles, channels, I-beams, and pipes so that its fabrication can be easily performed by a mill or local machine shop anywhere in the world. The highly machined and patented parts will be shipped direct to the mill by the McBride company with full instructions for assembly.

New Homogenizer System Eliminates Batch Preparation



THE HYDROPULSE consists of: (1) slurry tanks in which starch and other ingredients are mixed with water (cooking kettles can be used); (2) a booster pump that forces the cold mix through (3) a heat exchanger, where the mix is heated to the swelling-point of the starch; and (4) the homogenizer, which produces a continuous flow of size.

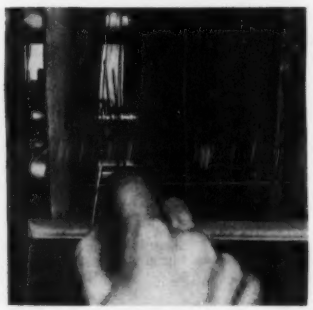
A new homogenizing method of preparing warp size has been announced by Scott & Williams, Inc., Empire State Bldg., New York 1, N. Y. Called Hydropulse, the system is said to eliminate batch-preparation of size. No live steam is used; hence there is no varying dilution. There are no cross-heads, cross-head guides, or packing and stuffing boxes to maintain.

WIRA "Reach-In" Machine Adapted to Cotton Warps

Successful operation of the Wool Industries Research Assn. of England "reaching-" machine on leased cotton warps has been announced by Muschamp Taylor Ltd., Pollard St., Manchester, England.

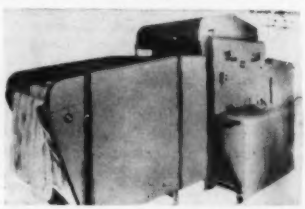
The machine has a frame for mounting the warp, heddles, reed, etc. A traveling carriage or selector unit is mounted on a runway extending along the full length of the frame right behind the drawing-in position at the heddle shafts.

A picking-out finger oscillates in a semicircle to select warp ends. The faster the operator works, the faster the ends are presented by the machine for drawing. Warp widths up to 100 in. can be accommodated.



ENDS FROM THIS COTTON WARP are presented for drawing in as rapidly as the operator can pull them through.

Skein-Conditioning Machine Has Flexible Production



SPEED OF SKEIN CARRIERS in the conditioning section of this skein-conditioning machine is five times the speed of carriers in the feeding section. This feature insures uniform conditioning of all skeins.

A new skein-conditioning machine, model S-3, has been developed by Kearny Mfg. Co., Inc., Kearny, N. J. Skeins to be conditioned are placed on metallic tubes or wood bars as they come from the dryer, and are placed on a loading frame. Conveyor chains with bronze carrier links lead the tubes or bars to the spray area where the conditioning takes place. Conditioned skeins are automatically transferred to the delivery frame of the machine, from which they are removed by the operator.

Operation of the machine is very flexible. A feed control with an approximate ratio of 1 to 4 makes it possible to pass from 7 to 28 carrier bars through the machine per minute. Calculated hourly production varies from approximately 1,700 to 6,799 lb.

The ratio of speeds between the feeding and conditioning conveyors is 1 to 5. In other words, whenever the feeding conveyor travels 1 ft, the conditioning conveyor has traveled 5 ft. This speed difference causes the carrier bars to pass through the conditioning chamber with sufficient distance between each other to allow a uniform coverage of all skeins. The slow-moving feeding conveyor also gives the operator ample time to keep the loading frame filled.

Single-Spindle Winder For Knitting Mills

SLOW-START DRIVE on this single-spindle winder reduces the danger of end breakage in starting up.

A winder specially developed for those hosiery manufacturers whose production of half-hose is not large enough to justify use of a full-size bobbin winder has been introduced by Muschamp Taylor Ltd., and is available through Foster Machine Co., Westfield, Mass.

The self-contained machine is mounted on a base board that can be fixed to a workbench. The unit consists of an orthodox single-spindle winding head with conventional disk build. A slow-start drive reduces the danger of end breakages on starting up.

Slasher Cylinder Uses Less Steam, Uses It More Efficiently

Great savings in steam and heat radiation are said to have been achieved by a new-type drying cylinder for slashers developed by Rigby & Mellor Ltd., Bury, Lancashire, England.

Outstanding feature of the new machine is an internal shell, approximately 3 in. from the outer shell, that reduces the amount of steam necessary without any loss in drying efficiency. Instead of the whole of the cylinder being filled with steam, only the 3-in. cavity between the two shells need be filled.

The total weight of the new cylinder is no greater than that of the normal types, an important factor since a heavier cylinder would require more power to rotate it and might cause strain on the yarn.

Heat losses brought about by radiation through the cylinder ends are said to be almost entirely avoided. The manufacturer states that in the ordinary type of cylinder these heat losses amount to 6° F. per sq. ft. per min. and that the steam contact at each end is reduced from an area of approximately 28 sq. ft. in the old cylinder to just over 4 sq. ft. in the new cylinder. The appreciable reduction in heat-radiation losses in the new cylinder is said to result in lower room temperatures and better working conditions.

Tension Cleans Dirt From Yarn

A WHEEL in this tension device with raised surfaces and slotted disks that exert a rubbing and rolling action on yarn is said to be helpful in removing dirt from yarn made from low-grade cotton.

A new type of self-cleaning dead-weight tension designed primarily for use in processing "dirty" yarn made from low-grade cotton has been developed by Muschamp Taylor Ltd., Vulcan Works, Pollard St., Manchester, England.

The tensions contain a freely rotating wheel in which three slots are cut. Through these slots drop the seeds and fly released from the yarn, under the action of the tensioning arrangement, that would otherwise accumulate and prevent the proper functioning of the device.

The outer rim of the wheel is raised slightly, as is the central boss or "hub." The normal type of dead-weight disks are used to exert the necessary tension on the yarn, and these disks are mounted on two suspended vertical posts so as to bring them into contact with the wheel. The disks rest on the raised outer rim and the raised central boss of the wheel, and the yarn passes between these surfaces of the wheel and the tension disks.

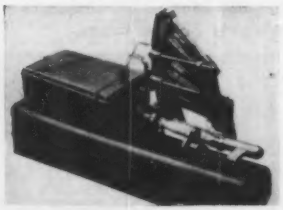
The yarn is in contact with the raised surfaces of the wheel at four points. This multi-contact is said to provide not only a thoroughly efficient and controlled tension, but also to have a definite cleaning effect on dirty yarns. Any seed ejected by the operation of the tension falls through the slots in the wheel and can, if necessary, be retained in a special receptacle provided for the purpose.

Swiss Bobbin Winder Improved

DESIGN CHANGES for the Giromat automatic bobbin winder have been made by Bruegger & Co. Ltd., Horgen-Zurich, Switzerland. Diameter control (as shown above) for the new winder is set by moving a pointer on the traverse-bar scale. This control is said to give positive and variable control of diameter within limits of shuttle capacity. Winder now can take bobbins up to 10 in. long. Tension is now controlled by setting a pointer against a scale on the tension device. The main tension disk rotates as the yarn presses through and is therefore self cleaning.

Other improvements include: redesigned traverse gearing, new tension compensator, steel shaper wheel instead of plastic, metal cover for traverse-bar and shaper mechanism, and a hardened-glass door so the operator can see when more empty bobbins are needed.

Controls Readily Accessible In New British Winder



BALL BEARINGS, seven in each head, are used in this new bobbin winder to carry all fast-moving parts.

A new, single-spindle, automatic bobbin winder which has four spindle speeds ranging from 2,000 to 5,000 rpm. has been introduced by George Hattersley & Sons Ltd., Keighley, Yorkshire, England. A trial six-head unit of the new winder is being installed at Hamilton Co. Ltd. Hamilton, Ont., Canada.

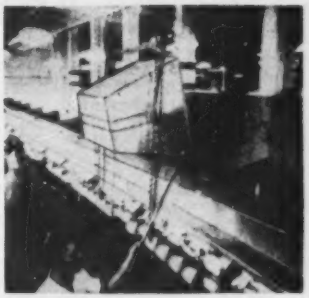
Each head of the new winder is a self-contained unit driven through a cone disk. The winder is built in six-spindle units. The drive is by a ¾-hp motor. Spindle speeds can be changed by changing the pulley ratios on a four-step V-rope cone.

Directly driven from the main spindle, the bunch builder allows accurate adjustments in yarn length from 0 to 18 yd. by setting a 10-position lever.

Bobbins of 6 to 10 in. in length can be used in the winder to take all classes of yarns from cone supply packages. Bobbin diameters are ¾ in. to 1¼ in.

As the necessary adjustments to the winding head are made from the outside, the entire internal mechanism is guarded by a quickly removable cover.

Winder Attachment Transports, Positions, and Stores Bobbins



POSITIONING AND TRANSPORTATION of bobbins are advantages offered by this new spooler and winder attachment.

An attachment for spooling and winding machines has been developed by P.O.M. Co., Industrial Consultants, and Werner Textile Consultants, 60 E. 42nd St., New York, N. Y. The device can be attached to most of the standard Foster or Universal winders which are creeled with spinning bobbins. Bobbins are brought from the spinning room or conditioning machine in a bucket that runs on an overhead rail.

The entire bucket can be emptied into the hopper with one movement of the arm by tilting the bucket. A large overhead hopper provides for the storage of a large number of bobbins that can be emptied into the hopper. Sufficient storage for a full shift or a full day, depending on the yarn count, is made available.

The spools or cones, when finished, are placed upon an endless belt conveyor and are transported to the cone hopper, container, or inspection table. Another conveyor system carries the empty bobbins back to the spinning room. The new device is said to facilitate and improve the normal positioning and transporting of bobbins and to allow the tender to take care of more spindles.

Automatic Creel Mover and Tension Control Improve Worsted Warping

Several new developments in worsted warping have been announced by Thomas Holt Ltd., Rochdale, and George Hattersley and Sons Ltd., Keighley, both of England.

Improvements made in the Holt creel include an automatic creel mover which moves the creel for each section of the warp in order to maintain a constant angle of the yarn between the creel and the swift. The mechanism automatically moves the creel as the headstock moves to build up the section and when a setting for the next section is made.

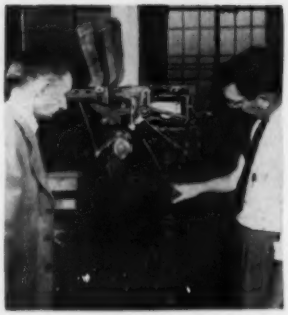
(Continued on page 220)

☆ For WEAVING

Long Dobby Chains Eliminated With New Attachment

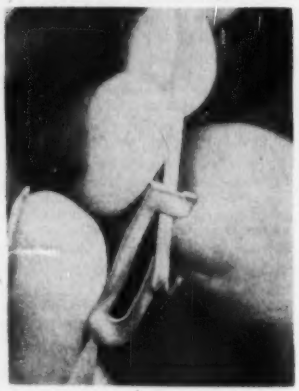
A new dobby attachment that controls the motion of the pattern-chain cylinder and permits shortening of the pattern chain for complicated cloth designs has been developed (patent pending) by Ivey Morris, N. C. Vocational Textile School, Belmont, N. C. In many cases, a short chain of less than thirty bars can be used to replace a chain of several hundred bars.

The device consists of a cam ratchet and levers that control the motion of the pattern-chain cylinder. The cylinder can be rotated in forward or intermittent motion, oscillated, or stopped in convenient sequence to produce a complicated long pattern in the cloth with very few bars. The attachment can be used on all dobby heads and will not interfere with other motions on the loom.



A DOBBY ATTACHMENT with 38 bars simplifies the pattern-chain work on a double-cloth woven diaper fabric that normally requires 760 bars. Ivey Morris, inventor, explains the mechanism to John Falk, principal of N. C. Vocational Textile School, Belmont, N. C.

Heddle Repair Modified

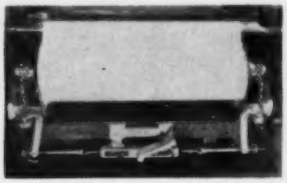


THE REPAIR is placed over the old heddle end, and the short prongs that remain from the old heddle are bent over as shown. After the old prongs have been bent over completely, a locking clip is clinched tightly.

A modified use of the Walker Lock-on heddle repair to permit fast, permanent repair of very lightweight heddles has been announced by Walker Mfg. Co., Philadelphia, Pa. The modification is for heddles having no swedge shoulders.

The same repair head is used, but cutting and treatment of the broken top loop is different. The only tools required are the conventional expansion-jaw pliers and long-nose pliers. Downtime for heddle repairs is said to be less than one-third of that required with conventional repairs.

Let-Off Motion Eliminates Weights Behind Loom



NO WEIGHTS are used in this warp let-off device recently developed in England.

A let-off motion that uses compression springs instead of weights to produce and regulate warp tension has been announced by Platt Bros. Ltd., Oldham, England.

More even tension and easier adjustment are two advantages claimed for the device, called the Richmond let-off motion.

Foot pressure on a pedal is all that's needed to release the tension when the beam has to be rotated.

Pneumatic Shuttleless Loom Developed in Sweden

A pneumatic shuttleless loom in which the filling is inserted by an air current is said to have been successfully developed by Max Paabo, Norrkoping, Sweden.

The loom is reported to weave quickly, smoothly, and almost noiselessly. Speed is said to be double that of a conventional loom, and cost is claimed to be lower than that of standard-type looms.

Swiss Harness Frame Now Made in U. S.

The Lightmetal harness frame, developed and first produced in Switzerland, is now being made in the U. S. by Grob Corp., New Bedford, Mass.

One feature of the frame is free-riding slide hooks that do not allow heddles to bunch. Side supports of the frame are made from "Lignostone," a highly compressed, impregnated wood that cannot warp and is moistureproof.

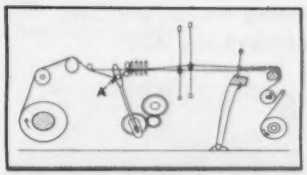
A special snap-in center support is provided for extra-long frames.

New Circular Loom For Jute-Bag Weaving

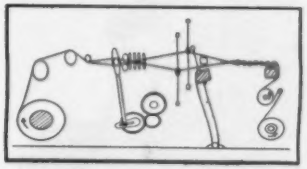
TWO WARP BEAMS and two shuttles are used in this circular jute loom from France.

A circular loom for weaving coarse fibers, especially jute, has been developed by Fayolle & Cie., 106 Cours Emile Zola, Villeurbanne (Rhone), France. The loom produces a plain-weave tube for bags about 23½ to 31 in. in flat width. The speed of the loom is about 150 picks per min. The two shuttles in the circular loom are drawn by magnets, roll on four rollers, and hold two cops of yarn.

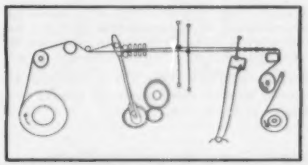
The company states that one operator can run six looms, or more if efficiency required is not over 75%. The power required for each loom is 1 hp.



FIRST PICK with SRRL tensioning attachment. Push bar (A) holds lower half of warp yarns tight as first pick is beat up.



SHED OPENED. There is equal tension on the entire warp as picking takes place.



SECOND PICK. Upper half of warp yarns is now tightened by the push bar as the second pick is beat up.

New Loom Attachment Weaves Waterproof Cotton Fabrics

An inexpensive loom attachment for weaving extra-tight, naturally waterproof cotton fabrics has been developed at the Southern Regional Research Laboratory, 2100 Robert E. Lee Blvd., New Orleans 19, La. The device, a new model of the loom attachment developed previously by the laboratory, can also be used in weaving conventional fabrics.

The new attachment is based on the principle of producing more "cover" on a fabric, and thus obtaining fabric waterproofness by having less tension on one shed layer than on the other as the lay beats up. This condition allows the loom to insert up to one-third more picks per inch than can be achieved otherwise.

By means of a push bar actuated from an auxiliary shaft driven from the loom cam shaft, the attachment applies tension first to one shed and then to the other during successive beatups of the filling. When released, this tension introduces considerable slackness in the shed layer and allows the filling thread to be beat up either over or under the previous pick. On the next pick, the slack shed becomes the tight shed and pulls the previous over- or under-riding pick into the plane of the fabric.

Constructed mostly of standard loom parts, the device can be built at a very reasonable price. It is said to be easily installed on standard looms.

Multiple-Cylinder Dobby Attachment Produces Jacquard Effects

FRONT VIEW of dobby attachment that is said to reduce changeover time in electric-blanket production by eliminating use of jacquard head.

A new multiple-cylinder dobby attachment recently patented by its inventor, Ivar O. Moberg, Spray, N. C., can be applied to any dobby or Knowles head motion without interfering with the conventional running of these harness motions. No pattern chain is used.

The multiple-cylinder attachment was primarily developed for production of electric blankets and electric sheets instead of the expensive jacquard head now used. The attachment is equally useful for fancy-border blankets, table cloths, draperies, etc., where several basic weaves occur at great intervals.

The attachment consists of a revolving magazine that holds six or eight aluminum pattern cylinders that are driven by a planetary gear motion, revolve around their own axis, and more around intermittently in their orbit when called to do so by the box chain of the loom so equipped.

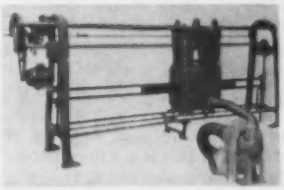
Each pattern cylinder can carry its own complete weave, or all the cylinders may be combined to produce a fancy weave within their limit.

The cylinder magazine can be called to move either forward or backward to bring either the preceding or succeeding cylinder into operating position. Since the whole cylinder revolves in unison, the danger of mispicks at the change of weaves is eliminated. The harnesses are operated and controlled by direct-peg indication from the cylinders.

Loom Temple Roll Uses Varied-Angle Principle

A RING TEMPLE ROLL, designed to use the principle of eccentric spacers to increase the pitch of the rings, has been announced by Broell Mfg. Co., Winbar, Pa. With this principle, a minimum of pull is exerted upon the fabric at the center, and tension increases to a maximum at the selvage.

Automatic Machine Cleans Reeds and Heddles



REEDS AND HEDDLES can be cleaned quickly and automatically by this machine, available with the dust collector if desired. Reeds can also be honed.

A new reed- and heddle-brushing machine is available from H. J. Theiler Corp., Whitinsville, Mass. The Swiss-made machine, called the Robot, is said to clean heddles while they are in the harness frame. Each machine is supplied with one pair of horse-hair brushes, one pair of bronze brushes, and a special honing attachment.

The horse-hair brushes are used to clean average dirty reeds and heddles. The bronze brushes are used to clean rusty reeds and heddles. The honing attachment is used to polish slightly damaged reed dents and to remove shuttle marks.

The two brushes move up and down and traverse the whole reed or harness frame. A dial at the end of the machine can be set to predetermine the number of horizontal traverses. The machine can be operated by an inexperienced male or female operator.

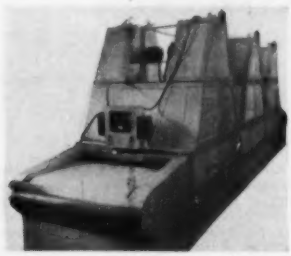
Rectangular-Eye Heddles Reduce Friction on Warp

A new line of heddles with a rectangular-shaped eye said to reduce friction on warp yarns has been introduced by H. J.

(Continued on page 224)

☆ For KNITTING

Hosiery Dryer Eliminates Final Boarding



STOCKINGS ARE DRIED in laid-out bundles as they pass through this dryer on a conveyor belt.

A basically new machine for the final finishing of ladies' all-nylon hosiery has been developed by Smith, Drum & Co., Allegheny Ave. below 5th, Philadelphia, Pa.

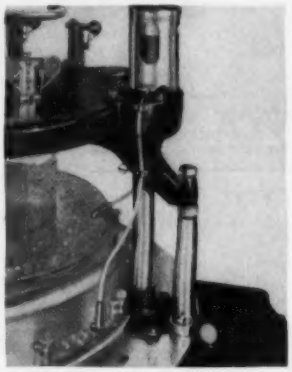
Production per operator is said to be four to five times usual rates, and the percentage of firsts is said to be increased because the system requires no forms whatever. A dull appearance is also imparted to the hosiery.

On a machine installed recently at Berkshire Knitting Mills, three operators with only two days' experience produced 1,200 dozen pairs of 15-den. stockings in 8 hr. (400 dozen per operator) with considerably less effort than required to do normal boarding.

Preboarding, dyeing, and extracting are carried out as normally handled by many firms especially concerned with high-quality work. Then, instead of being boarded individually, the stockings are delivered while in the hosiery nets to the feed end of the new Smith-Drum dryer. The machine has a traveling conveyor belt that passes through a drying cabinet with accurately controlled temperature and air currents.

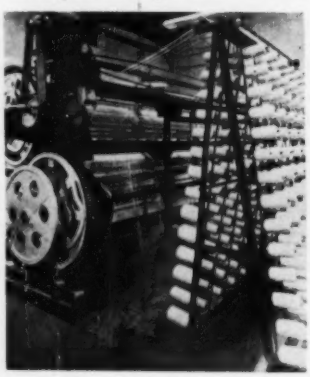
Three operators run each machine. The first operator removes and opens the folded goods from the dye net. The second operator places and lays out the bundle of 12 stockings full length on the belt of the conveyor dryer. The third operator removes the bundles at the delivery end, folds them once, and places them on carrier boards ready for transfer to the pairing and inspecting departments.

Knitting Needles and Cams Automatically Oiled



A MEASURED QUANTITY of oil is delivered automatically at predetermined intervals by this oiler developed by Mellor Bromley & Co. Ltd., Leicester, England. Savings in oil and in operator's time, and elimination of flooded needles which cause oil streaks are claimed for the unit.

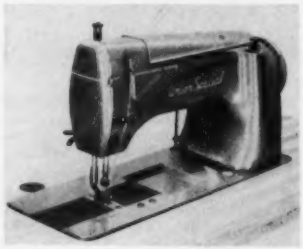
High-Speed Net Machine Developed in England



THE PROLESTER NET MACHINE is largely automatic, it is claimed, and can be operated by one person.

A new, high-speed, power net machine has been developed by Porter Spiers (Leicester) Ltd., Peckleton Common, near Earl Shilton, Leicester, England. The machine is said to be capable of producing the type of camouflage netting specified by the U. S. Army.

New Needle-Feed Lockstitch Machine Available

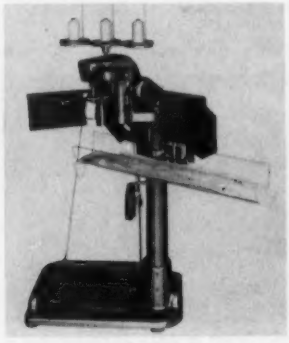


BOTH LIGHT AND HEAVY WORK can be handled by this new Lockstitch machine.

Two new classes of needle-feed Lockstitch machines, a single-needle machine identified as Class 61800 and a two-needle machine designated as Class 62200, have been developed by Union Special Machine Co., Chicago, Ill. Both machines produce stitch type 301 and are being produced in styles suitable for use on light- and heavy-weight work.

The hook and hookshaft have been designed so that the removal of the hook does not require retiming or resetting of the hook point when it is replaced in the machine. The hook mechanism also contains a mechanical opener.

Work Tray, Receiving Plate Fit on Seamer

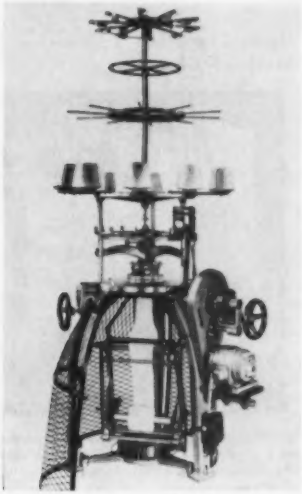


SNAGGING DURING SEAMING is reduced through use of a plastic work tray and a rubber-coated receiving plate.

A new plastic work tray for use in connection with Union Special class-41300 pedestal hosiery seamers is now available from Union Special Machine Co., Chicago, Ill. In addition to the tray, which holds 1 doz. unseamed stockings, a rubber-coated plate for holding the stockings after they are seamed is also available.

NOT INCLUDED IN THIS REVIEW are the knitting machines and equipment introduced at the 1951 Knitting Arts Exhibition. For a review of these, see TEXTILE WORLD, June, 1951, page 120, or write Editor, TEXTILE WORLD, for a reprint of the show report.

New Lines of Rib-Cloth Machines



MODEL-SR RIB-CLOTH MACHINE is of simplified yet more versatile construction.

Supreme Knitting Machine Co., 105 Johnson Ave., Brooklyn, N. Y., has introduced a line of rib-cloth knitting machines that have the following features:

1. Single-action, micromatic, dial-elevating and lowering adjustment designed to give the knitter accurate and uniform stitch adjustment and greater space between knitting feeds.
2. Dogless construction to eliminate pinch lines and insure positive alignment.
3. New method of converting from plain to swiss rib.
4. Simplified and instantaneous synchronization of dial to cylinder needles.
5. Individual, channeled cams, of substantial thickness, which lock needles in the proper position at all times and prevent smash-ups.
6. Ability to use very coarse or very fine yarns with a minimum of adjustments.
7. Ability to produce cloth of high elasticity and stability.
8. Sturdy construction.
9. Large open areas around cylinder and dial for easy cleaning, inspection, and maintenance.
10. Automatic control to insure uniform cloth-roll size.
11. Roller-bearing thrust for entire center drive.

The new machine is available in sizes from 7 to 30 in., with 10 to 44 feeds respectively.

Refinements Added to Aveco Tricot Knitter

The refined Kidde-Aveco two-bar, 168-in. tricot-knitting machine has been introduced by Kidde Mfg. Co., Bloomfield, N. J. The Kidde company recently took over the Aveco knitter and has added refinements and new features.

The heavy one-piece base and girt, designed to insure accurate alignment of parts, has been kept intact, as have many other features proved to be good.

Here are some of the changes and improvements developed by Kidde:

A continuous let-off and a continuous take-up combined with a quick-stop mechanism have eliminated shade marks and reduced stop marks to a point where they usually finish out. With this new let-off, intermediate brackets on the tensions have been eliminated; and a clear yarn sheet is provided across the machine.

The new continuous take-up permits quality to be established quickly and easily by turning an adjustment knob. There are no gears or sprockets to be changed, and the clutch has been eliminated. Once set, it requires no adjustment, the manufacturer states.

A JOGGING CONTROL that eliminates hand wheels is one of several new features added by Kidde Mfg. Co. to the Aveco machine.

With the new quick stop, the machine can be stopped and started quickly—an important factor in reducing stop marks to a minimum.

Hand wheels have been eliminated, and in place the machine is now equipped with an "inching" or "jogging" control.

German Knitting Machines Shown at Leipzig

Modernized versions of German full-fashioned-knitting machines familiar to hosiery manufactures in pre-war years were shown at the recent Leipzig Fair. Here are the machines that were exhibited and the firms that showed them:

1. **By Textima**, represented by Muschamp Taylor Ltd., Vulcan Works, Pollard St., Manchester, England—

a. Type FSW-1 full-fashioned-knitting machine, a 24-section, 51-gauge unit with automatic welt turners. The machine, built by Schubert & Salzer, has cams suitable for the new fibers, provision for ten thread carriers, an improved shock-absorber system, and central controls.

b. The Ideal links-and-links double-cylinder machine. It is made in diameters from 2¾ to 4¼ in. with needles from 5 to 18 per in.

c. A single-cylinder machine to be supplied in various gauges up to 26 needles per in.

d. A rib-top machine with automatic feed for elastic-yarn knitting.

e. A new interlock machine with positive dial drive, mechanism for making tuck-stitch effects, feed wheels, and electric stop motion.

f. A comprehensive range of hand and power flat-knitting machines, all made by Seyfort & Donner.

g. Kohler linkers and cup seamers on individual stands.

2. **By Sachsische Stickautomatenfabrik**, Dresden—

a. A three-head automatic embroidery machine with jacquard control capable of making attractive designs on fabrics held by tambour rings.

3. **By Wirkmaschinenfabrik Apolda**—

a. A jacquard warp-knitting loom with bearded needles. The jacquard is placed over the machine and controls, by cords and springs, the sideways pressing of special types of thread guides to make patterns on floral or symmetrical lines in openwork effects.

b. Two latch-needle raschel-type looms, one of 30 gauge working elastic fabric, and the other of coarse gauge working a coarse net with designs made with "filling-in" threads. On these machines, the old system of needle-bar control—the cam shaft and piston—has been replaced by a short lever motion giving the needle bar a slight "arc" movement.

4. **By Emil Wirth**—

a. Tow machines of the lock-knit type with speeds of 450 to 500 courses per min. and a machine for the production of this class of fabric. The warp loom runs at 900 courses with the standard sinker movement. The guides make only the sideways movement; the needles take

a figure-eight path and pass between the guides to obtain their threads.

5. **By Ruma Veb**—

a. A circular rib machine for heavy tuck-stitch designs in which the needle set up and the cam-movement control determine the pattern.

b. A universal jacquard-rib machine that has a master jacquard on one side of the machine that controls, through cables, the position of the cams acting on the needle packs.

6. **By Chemnitzer Strickmaschinenfabrik A. G.**—

a. A jacquard machine with twelve feeds, with the needle selection of each feed governed by steel jacquard tapes as the machine cylinder revolves.

7. **By Elite-Diamantwerke Aktiengesellschaft**—

a. Two models of what is claimed to be the first electric-jacquard flat machine. The double and treble systems shown has a jacquard at the end of the machine and a number of electric solenoids over the cams and thread guide-selecting mechanism.

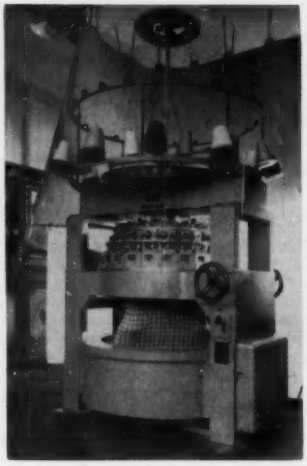
Plaiting Accomplished With Adjustable Wrap Horn

ADJUSTABLE WRAP HORN (left) for the 3½-in. HH-PW, color-in-color, true wrap machine has been announced by Scott & Williams, 350 Fifth Ave., New York, N. Y. The improved form is said to accent stocking ribs sharply.

Latch-Eye Needles For Hosiery Repair

Latch-eye needles for invisible mending of hosiery are now being made by Culver Products Co., 3630 Eastham Drive, Culver City, Calif. These precision needles are made in ten sizes and styles for drop-stitch, hosiery, and knitted goods repair, French re-weaving, in-weaving, and patch weaving. Full instructions for the proper use of these needles for invisible mending are also supplied.

New Jacquard Knitter— Larger and More Flexible



A SELECTOR MECHANISM makes possible the production of a wide variety of simple and complicated designs from one stamped steel film.

A new 30-in.-diameter machine called the Weveknit A-24 has been developed by Dubied Machinery Co., 11-30 45th Rd., Long Island City 1, N. Y. The pattern produced on the Weveknit is governed by holes punched in a steel "film" that passes around the knitting elements. About 3 hr. are required to stamp one film, depending on the design required.

A selector-wheel mechanism allows rapid changes in fabric design from elaborate to simple, by the use of selected holes punched in the film. Each of the 24 knitting elements is provided with a selector wheel. The selector wheel permits needles to be activated by the steel film or not, as called for by the design.

The selector-wheel mechanism makes it possible to put a large number of designs on one film and only use one at a time. The machine also delivers solid-color fabrics at speeds up to 10 meters per hr.

Knitting Loom Produces Wide or Narrow Fabric

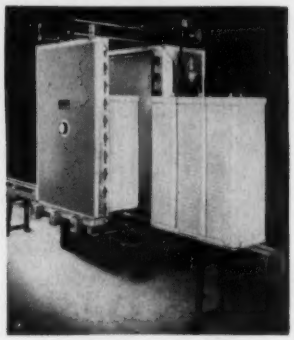
A high-speed knitting loom for standard or novelty fabrics has been announced by McDowell Associates, Inc., 2568 Park Ave., New York 51, N. Y. The machine is said to be capable of using any type of material or synthetic yarn in equivalent yarn numbers of 150 to 900 den.

The knitting loom, available in widths of 60, 72, and 120 in., can also be set up to knit narrow fabrics and trimmings.

Knitted Scavenger-Roll Cover is Seamless

A new knitted cover for scavenger rolls has been announced by The Textile Laboratories, Gastonia, N. C. The roll cover is seamless and is said to catch 50% more lint than cloth or paper covers.

Nylon Crimp Set In Steam Chamber



A VACUUM is created in the steam chamber after steaming to eliminate moisture from the nylon.

Crimp setting of nylon staple or tow can now be accomplished in a precise, mechanical operation with the crimp setter developed by Turbo Machine Co., Lansdale, Pa. The new machine makes possible the production of 200 to 250 lb. of crimp-set staple per hr.

With the crimp setter, normal processing time is approximately 20 min. An operator is required only to load and unload carriers. Each lot of staple or tow remains in the steam retort a predetermined length of time. Because of the automatic operation, there is no variation in quality of crimp-set staple or tow.

One feature of the Turbo crimp setter is an electrical timing device which automatically shuts off steam, exhaust the chamber through a jet exhaust valve, and creates a vacuum which eliminates moisture from the nylon. After the vacuum period, the chamber is brought back to atmospheric pressure, and the door opens.

Machine Automatically Knits Argyle Socks

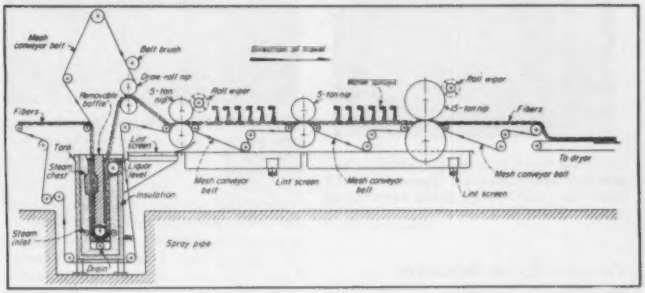
A new machine designed to duplicate intricate and expensive handknit effects in men's argyle hosiery has been developed by Standard Hosiery Mills, Inc., Burlington, N. C., a unit of Chester H. Roth Co.

The machine makes possible a process called edge-framing that produces classic argyle with clarity of pattern and color

(*Continued on page 230*)

☆ For DYEING & FINISHING

Machine Dyes or Scours Raw Stock Continuously



FIBER IS CARRIED through the continuous-dyeing machine, shown diagrammatically, as a sandwich between the two mesh conveyor belts.

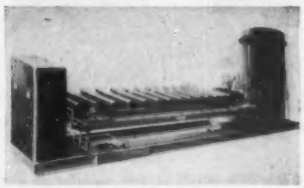
A new machine for the continuous dyeing or other processing of fibers, stock, or staple has been developed by General Dyestuff Corp., 435 Hudson St., New York 14, N. Y. Machines will be supplied by Morrison Machine Co., Paterson, N. J. The new equipment is said to be particularly adapted to the application of vat and naphthol colors to rayon staple.

Contact time of the entering material with the dye liquor, is reported to be very short. Whenever a process calls for fairly short exposure of materials to treating solutions, this new machine is considered suitable. Chemical treatment, dyeing, and scouring of wool as well as of all other fibers have been done satisfactorily. It is expected bonded fabrics and cotton warps may eventually be processed.

The design of this machine provides for chemical and dye feeds in the usual manner for continuous operation. Conveyors are variable tensionwise so that an allowance can be made for thickness of laps or stocks and for various types of fibers. All parts of the machine exposed to chemicals can be cleaned easily because of their accessibility and stainless steel construction.

Another advantage claimed for this machine is that, preliminary to a full-scale run, as little as ½ lb. of stock may be run and the results evaluated in less than five minutes. The machine design is compact with floor space of 17x6 ft. The machines can be used in series for complicated processing.

Produce Your Own Hypochlorite for Bleaching



ENOUGH 100% CAUSTIC SODA and chlorine is made in this plant every 24 hr. to produce over 400 gal of 5½% solution sodium or calcium hypochlorite.

A new electrolytic unit by which a plant may produce its own caustic soda and hypochlorite in small quantities as required, directly from common salt, has been developed by Amroc, Inc., 280 Broadway, New York 17, N. Y. The plant occupies a space of 3½x25 ft.

The unit is a caustic-chlorine-producing machine with auxiliary equipment to convert the chlorine into either sodium hypochlorite or a solution of calcium hypochlorite.

This unit, called the "Amroc Packet plant," consists of a highly developed mercury cell complete with denuder, a power rectifier, brine-preparation tanks (arranged vertically), brine-recirculation equipment, caustic-receiving tank, hypochlorite-absorption tower, etc., all mounted on a single foundation. No special housing is necessary. The plant is said generally to require no more space than that previously occupied for storing the chemicals.

The 24-hr. output of the packet plant is guaranteed to be not less than 225 lb. of 100% caustic soda and 200 lb. of chlorine which, with the automatic equipment included, as sufficient to produce over 400 gal. of sodium or calcium hypochlorite in a 5½% solution.

Versatile Presetting Machine Features High Production

A SATURATED ATMOSPHERE, free from air and free oxygen, is said to insure uniform dyeing as worked out in this presetting unit.

A new universal presetting machine that is said to combine speedy, uniform results with complete flexibility for pre-boarding or one-boarding methods has been developed by Paramount Textile Machinery Co., 131 S. Wabash Ave., Chicago 3, Ill. The universal presetter can be used for presetting all nylon stockings and for drying after presetting.

The machine uses a fully saturated atmosphere with air and free oxygen reduced to a minimum. Uniform dye shades are said to be obtained. Monofilaments preset only once at maximum atmospheric water-vapor temperature are claimed to retain a large degree of their original stitch formation.

Controls automatically time cycles for both vapor setting and drying. Two new-type atmospheric vents prevent pressure from building up within the cabinet and avoid back-drafts of cool air detrimental to the presetting operation. The cabinet is shipped complete with assembled fittings and electric accessories for 110 v., 60-cycle, single phase a. c.

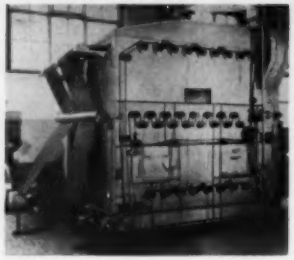
Attachment Applies Adhesive to Web Material

A multi-purpose coating attachment for underside and top coating of webs is a new development of Potdevin Machine Co., 1285 38th St., Brooklyn, N. Y. Called the "BTC," the coating attachment is fitted with special brackets permitting mounting in a position for top, side, or underside.

Constant Temperature Features Swiss Fixation Machine

A new machine, the Turbofixer, System Neuhaus, for fixation of pigment prints, wash-fast finishes, and resin finishes has been developed by Werner Neuhaus Construction Plant, Burgdorf, Switzerland. The fabric is conveyed at a constant but adjustable speed through an insulated chamber heated by electrical elements to constant temperature. Hot air is circulated around all parts of fabric without actual contact with the heating elements.

If the finish requires acid hardening, acetic acid can be introduced as a vapor into the chamber. The Turbofixer will polymerize and fix dyes and resin finishes at temperatures of from 80° to 200° C. The machine is supplied in various models for varying width and production requirements.



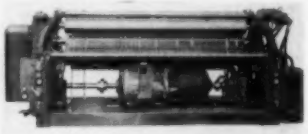
UNIFORM HEAT from electric elements and minimum heat losses are claimed for this Swiss fixing unit. Temperatures run from 80 to 200° C.

Piece Goods Dyed In Williams Hot-Oil Unit

A new process for dyeing of piece goods in a Williams unit containing hot mineral oil has been announced by General Dyestuff Corp., 435 Hudson St., New York. The method is recommended for dyeing with vat and sulphur colors as well as other types of dyestuffs.

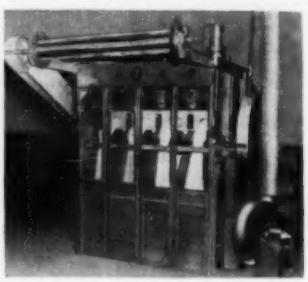
Compared to the standard Williams method of dyeing, the new Williams machine method is said to have the following advantages: (1) more economical handling on short runs, (2) better shading, (3) better appearance of dyed material, particularly on low count constructions, (4) greater stability of dyestuffs, (5) decreased time of development, and (6 elimination of the necessity of using two Williams units for reduction and fixation

Variable-Speed Rewinder Has 36-in. Capacity



A NEW DUPLEX REWINDER of simple design has been developed by Bagley & Sewall, 500 Fifth Ave., New York, N. Y. The new No. 15 rewinder has hydraulic-driven differential rewind shafts. Air-operated slitters can make strips as narrow as ½ in. Other features of the rewinder are its variable-speed drive up to 1,500 rpm., compactness, and vibrationless operation. Roll widths from 42 to 92 in. can be run on the machine.

Semi-Continuous Crusher Has Pneumatic Control



GREATER EASE OF OPERATION results from improvements made in the semi-continuous crusher developed by Riggs & Lombard Co., Suffolk St., Lowell, Mass. Top-roll-pressure equipment has been redesigned to give finger-tip control and more uniform pressure from roll to roll, according to the company. New exhaust equipment gives more complete fabric cleaning and exhaustion of dust from the inside of the machine.

A.C.-D.C. Drive Gives Better Range Control

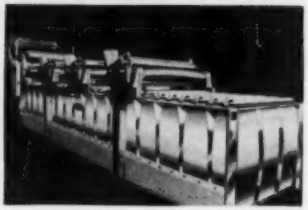
Use of a.c.-d.c. drives on its continuous washer, carbonizing ranges, and other range equipment has been announced by Riggs & Lombard, Inc., Lowell, Mass.

The drive gives a variable-speed range, and each unit in the range is kept in step with the preceding and following unit through counterweighted dancer rolls connected to rheostats. Use of the new drive is said to result in close control at any speed and in exceptionally smooth acceleration. Mills using this new drive report very satisfactory results, according to the manufacturers.

New Boil-Off Machine

Five new features designed for removal of chemical elements used in the boil-off are incorporated in a new unit developed by Hinnekens Machine Co., Inc., Paterson, N. J. The machine now has a new opener with rubber expanders, two new squeeze-roll devices, a new stainless-steel vertical spray, and a new take-up arrangement.

Open Width Washers For Resin-Treated Rayons

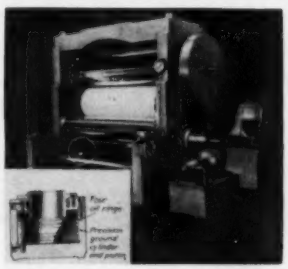


OPEN-WIDTH WASHING of spun rayon after curing with resin finishes is said to have produced, in mill tests, results equivalent to rope washing.

Successful washing of resin-treated rayons after curing is a newly developed application for Tensitrol washers announced by Rodney Hunt Machine Co., Orange, Mass. The company states that manufacturers of rayon suitings have found that Tensitrol washers have eliminated all need for rope washing after curing since the fabric can be washed at high speed with full relaxation and top washing efficiency.

Comparative tests made on fabrics washed in the standard dye-beck and the Tensitrol washer showed no difference in the degree of washing. Shrinkage tests showed that the fabric washed in the washer was equal or better than that which had been beck-washed. The hand of both the dye-beck-washed and the Tensitrol-washed fabrics was the same, and the working loss in both fabrics was also the same.

Improved Calender Reduces Maintenance



CYLINDER UNIT of this calender is now made of forged steel. Accurately machined cylinders and pistons use four step-seal piston rings.

An improvement in its 80-ton hydraulic calender has been announced by Van Vlaanderen Machine Co., 370 Straight St., Paterson, N. J.

The cylinders and pistons have been enlarged to maintain an 80-ton nip pressure at an oil pressure of only 770 psi.

Periodic disassembly for replacement of the old-type ram packing is no longer necessary with the new improvements.

Nylon Fabric Continuously Set by Radiant Heat

OPERATOR SETS CONTROLLER to setting temperature of the fabric in this new nylon-setting machine.

A nylon-setting machine that permanently sets nylon-tricot fabric at a continuous rate of 16 yd. per min. has been developed by McCreary Machine Works, Inc., Cohoes, N. Y., with the assistance of the General Electric Company, industrial-heating division.

Designed to be installed on existing tenter frames, the new machine consists of aluminum reflector units that house Calrod tubular heaters. Automatic temperature control is provided by an electronic unit that allows automatic stepless heat adjustment through thermocouples located in the reflector frames.

Operating costs are said to be less than $1 per hr. Compared with autoclave and other methods, radiant-heat setting requires only five instead of 10 steps, and the width of the set fabric is constant. Dyeing can be done either before or after setting, and the method is continuous. Since the material is set while still on the tenter frame, extreme accuracy in dimension is obtained.

The machine is designed with enough temperature range to treat other synthetic fabrics, such as Dacron and Orlon.

Dye-Winch Cover Made of Orlon

A dye-winch cover, woven of Orlon acrylic fiber, has been developed by Martin Wiener Co., 225 Clifton Blvd., Clifton, N. J. The new cover cloth's special combination of yarn and weave is said to give maximum traction to increase the pulling power of a revolving dye creel.

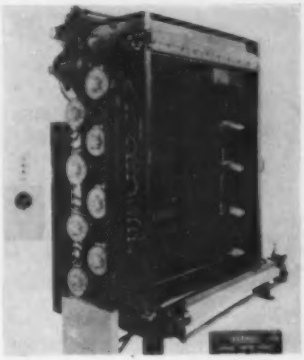
The new winch cover absorbs little or no color and thereby allows dyers a quick color change on the same machine. Stripping of covers is said to be eliminated.

Highly resistant to chemical degradation, the Orlon cloth is said to be impervious to mildew and to last longer than cotton covers. The new product is being made in all widths.

Improved Brushing Machine Has Split-Second Brake

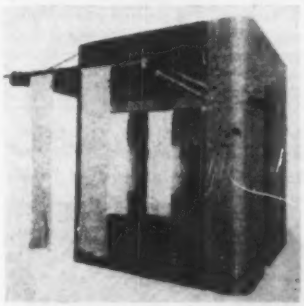
A new element in the design of the latest brushing machine made by Hermas Machine Co., Warburton Ave., Hawthorne, N. J., is a Warner electric-brake system designed to assure instant and simultaneous stopping of all the brush rolls together, as well as simultaneous stopping of the Hermas shear.

The braking system is applied to the separate brush rolls, each of which has its own motor. Control of the entire system is by the stop button on the shear. There'll be no more piled-up goods between brush and shear, according to the maker.



AN ELECTRIC BRAKE on each motor driving the brushes stops the brushes almost instantly, thereby preventing piled-up goods between brush and shear.

New Compact Dryer Controls Fabric Tension



A PRODUCTION RATE of 3,000 lb. in 8 hr. is claimed for this new dryer. Heating-up time is said to be 10 min. or less.

A new dryer called the Geni has been developed by Grand Rapids Textile Machinery Co., 1405 S. Division Ave., Grand Rapids, Mich. High drying efficiency is claimed, in a small floor space of 8 ft. 6 in. long by 9 ft. wide, equal to units requiring ten times this floor space. The variable-speed feed on the entering unit controls feeding of various weights and types of material so that starting tension is eliminated.

The moisture in the fabric is raised to a temperature at which it vaporizes before any attempt is made to remove it. This vaporization is done by the use of infrared electric coils or infrared gas burners. This process requires only about 30% of the drying cabinet but is said to do more than 85% of the drying job.

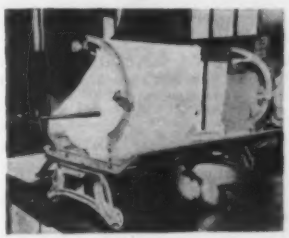
Shrinkage control in the dryer is attained by the short path of the cloth which requires very little manipulation. The cloth is fed into the dryer loosely at a speed that can be varied to suit all types and weights of cloth. Cloth leaving the dryer is said to be full and lofty and to have no sharp creases.

It is claimed that the machine will dry approximately 3,000 lb. in 8 hr. It is also practical for a smaller mill since it requires 10 min., or less to heat the machine up from room temperature to a temperature suitable for drying. The dryer can be used for heat-setting thermoplastic fabrics or finishes up to a temperature of 350° F. and higher.

Spreader Lays Goods Face-One-Way

A new turntable cloth spreader for spreading flat-folded and rolled piece goods face-one-way in both directions on the cutting table from one piece of goods has been developed by Cutting Room Appliances Corp., 45 West 25th St., New York 10.

The machine permits the operator to go back down the table after the first spread without rethreading the machine at the end of each layer. Thus time is saved which is usually spent in rethreading the machine after each lay is made.



RETHREADING OF THE MACHINE after each layer is put down is eliminated by this turntable spreader.

Effortless Operation Claimed for Lockstitch Machine

A NEW FEED MECHANISM has been incorporated among other improvements in this machine to produce even feeding of materials and smooth, flat seams.

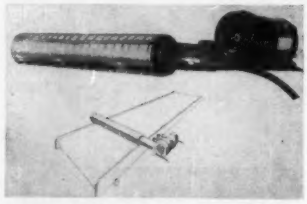
A new, single-needle, lockstitch machine said to embody many improvements over previous machines has been developed by Union Special Machine Co., Chicago, Ill. The new machine is designed as Class 61400, and is now in regular production and immediately available.

The feed mechanism has been designed to produce a smooth, symmetrical feed curve that gives even feeding of materials and smooth, flat seams. The new stitch-regulating mechanism has a pushbutton control for quick, easy stitch-length adjustment.

The presser bar has been shortened to give a light, yet positive, feeding action. These lighter parts, combined with the feed motion, result in a light, easy, feather-like touch and give the operator the feeling of effortless, smooth operation.

Another improvement is a completely new thread-control tension assembly which not only assists in better thread control, but allows full adjustment from outside the machine.

Blower Available For Drying, Preheating



PREHEATING OR SUPPLEMENTARY DRYING of textile materials can be done by this blower that releases air at 400° F.

A new electric-heat blower unit for drying or preheating materials has been developed by Master Appliance Co., Racine, Wis. Air supply is developed by an electric-motor-driven blower. Heat is developed by electrical heating elements.

Other sizes of heat blowers with various capacities are being developed by the company.

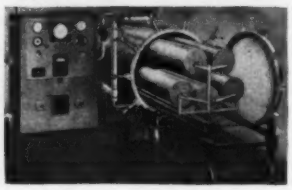
Cloth Singer Has Gas-Mixing Carburetor

New radiant-flame compression singeing equipment has been developed by C. M. Kemp Mfg. Co., Baltimore, Md. Designed to fulfill a need for better and faster singeing of fabrics, the equipment is recommended for acetates, broadcloth, damasks, drills, mohair, rayon twills, velours, and mixture goods, as well as fabrics used for sheeting.

In radiant-flame compression singeing, the cloth forms one side of a combustion chamber solidly filled with flame under pressure. This combustion chamber is said to contain no excess oxygen. The nap is not burned, but is carbonized and carried away by escaping combustion gases. It requires only 1/15 to 1/25 of a second for the cloth to travel over the burner.

The Kemp singeing installation embodies a series-S industrial carburetor. Designed by Kemp, this unit completely and accurately pre-mixes gas and air, and is unaffected by variations in feed-line gas pressure or by a change in demand from the burners. The carburetor is equipped with approved devices, including a flash-arresting unit. Once set to correct ratio, the carburetor can be locked at that setting, and need not be adjusted again, the company states.

Nylon-Setting Machine Treats Rolls of Woven or Knitted Fabric



NYLON-SETTING MACHINE treats fabric in roll form and uses vacuum with pressure steam to do the job.

A steam setting machine specifically designed for treating woven and knitted nylon fabrics has been introduced by Sanderson & Co. Ltd., 16 Cumberland St., Manchester, England.

The essential feature of the machine is that the rolls of fabric are contained within a closed compartment, where they are subjected to steaming under controlled conditions of temperature and pressure.

Chief component of the machine is a jacketed cylindrical compartment, equipped at the front with a circular door fitted with quick-acting clamps. Rolls of fabric, mounted on a special frame, are moved in and out of the machine from an undercarriage running on rails at floor level. The control unit, which is mounted beside the machine, has an air-cooled, self-lubricating vacuum pump coupled to a 6-h.p. motor.

Riser Eliminates Damage To Narrow Fabrics

LOWER BLOCKING costs and less employee fatigue are said to result from the ball-bearing rollers and lifetime lubrication of this new riser.

A new, all-aluminum high-speed riser for narrow-fabric finishing which automatically adjusts itself to different skein lengths and sudden tensions has been developed by A. B. Landis Sons, Inc., Chestnut Hill, Philadelphia 18, Pa.

The riser is said to eliminate breakage of even the frailest ribbons. Its highly polished rollers, running on sealed noiseless bearings, offer ...o drag and can be stopped by hand with complete safety at any speed. Fast starting and sudden stops create no problems, and there is practically no limit to blocking speed. Maintenance cost is negligible—no oiling or greasing of the new riser is required.

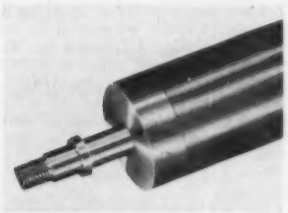
The riser is manufactured in two sizes. Model 1-A is designed for 100- or 200-yd. skeins of light narrow ribbon or seam-binding. Model 2-A is for heavier, bulkier skeins.

Back Gray Eliminated by Rubber-Synthetic Blanket

There's a new type of blanket for textile printing that is said completely to eliminate the need for the conventional back gray. The blanket was developed by Dewey & Almy Chemical Co., 50 Whittemore St., Cambridge 40, Mass., and has been undergoing full-scale tests under actual plant conditions. In these tests, since the first of the year, 2,000,000 yd. of print cloth were produced in a variety of constructions and patterns.

The new product successfully "welds" natural and synthetic fibers with synthetic rubber into an endless blanket with a washable, absorptive, and extremely durable print surface, the company states.

Metal-Core Brush Life Lengthened by Improvements



STAINLESS-STEEL END PLUG with a 1-in. stainless-steel shoulder improves the strength, lightness, and corrosion resistance of the metal brush cone.

Improvements in Metlkor brushes to further increase their life span have been made by M. W. Jenkins' Sons, Inc., Cedar Grove, N. J.

A new and improved bronze end ring secures the copper or stainless steel winding strip more firmly than the old type.

The substitution of stainless steel and plugs for bronze castings makes these new plugs harder, tougher, and more corrosion-resistant. Stainless steel is lighter than bronze, a factor that mill men appreciate because furnishers are handled several times a day when colors are changed. In addition, a wider shoulder extending well into the winding assures protection from corrosion at the brush ends should loose or slightly displaced rings allow color to penetrate the winding. Gudgeons are also protected against becoming loose when handled carelessly in the mill.

Woven Silk Color Card Has 15,000 Colors

A WOVEN COLOR CARD made of silk fabric and containing about 15,000 different shades has been developed by Walter Aebli of Walter Aebli & Co., manufacturer, Schuetzengasse 21, Zurich, Switzerland. The fabric has ¼-in. squares of color formed by 237 ½-in. bands of differently colored yarns in both warp and filling. Colors in the fabric can be identified by numbers along each edge of the fabric. Larger fabrics, with ¾-in. squares, are also available.

Compartment-Type Open Soaper Has New Design Features

A new compartment-type open soaper has been developed by James Hunter Machine Co., North Adams, Mass. The cloth is fed to the machine through a set of Mecco guides and draw rolls to the first bowl. The cloth then passes vertically over stainless-steel top and bottom idler rolls and over a curved rubber expander to the main nip rolls.

These nip rolls can be furnished with either 3- or 5-ton pressure. The bottom roll is of centrifugally cast stainless steel and the top roll is rubber covered to any density required by the mill. These main squeeze rolls, as well as the idler rolls, are rigidly supported in a cast-iron frame which is entirely independent of the stainless-steel bowl itself.

Pressure on the main rolls is supplied through Stabiliflo motors, the control for which is located in the casting which supports the main roll bearings. The tanks are fabricated from type #316 SMO stainless steel and all corners and bottoms are rounded for ease in cleaning. A skimmer trough is furnished in each tank to clear away sludge or other foreign matter.

40 DRY CANS follow the final squeeze. Cans are 23 in. in diameter and operate under 30 to 50 lb. pressure.

Running speeds of 125 yd. per min. are claimed for the machine on a complete range of fabrics. Water flow as well as addition of acid and soap can be entirely automatic. The bowls can also be used for scouring in addition to soaping.

Welt Imprint Will Not Wash Out

The Perma-Printer, a new welt-printing machine that produces a permanent mark on welts that is resistant to handling, stretching, and washing, has been developed by the Perma-Print Co., 1510-1512 Central Ave., Chattanooga, Tenn. The permanent imprint made by the machine is said to be able to carry much more information than practicable with heat transfers. No heat is used in the imprinting method, transfer rolls are eliminated, and the flexibility of the method permits changing of brands or color names as desired, rapidly and easily, as often as such changes are required.

The Perma-Printer is said to save at least $5 per thousand-dozen prints in direct labor and material costs. A further saving lies in the freedom from large inventories of roll transfers.

The Perma-Printer occupies a floor space of 3x4 ft.

USE OF TRANSFER ROLLS and heat is eliminated by this welt-printing machine. The imprint produced is said to be permanent to handling, stretching, and washing.

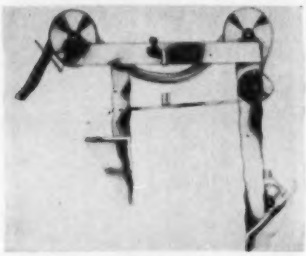
New Sewing Machine Is High Speed, Requires Little Maintenance

A new addition to its line of 50,000-Series industrial sewing machines is now available from Union Special Machine Co., Chicago, Ill. Designated as Style 51400 BP, the new machine supersedes Style 51400 P. It is specially designed for piecing sleeves, joining shoulders, and setting sleeves of shirts and similar garments with the two needle double-locked-stitch felled seam, Type 401-LSC-2. Now in regular production, the machine is offered in standard gages, 6, 8, 10, 12, 16, and 18.

Improved features according to the manufacturer, are:

1. Automatic lubrication from single reservoir.
2. Antifriction bearings in feed lift, looper avoid, and feed drive for greater speed, smoother operation with less wear and tear.
3. Improved looper throw-out mechanism.
4. New seize-resistant main bearing, an important safety factor that prevents "freezing."
5. Allen-head set screws in the handwheel, looper-drive eccentric coupling, feed-lift eccentric, and looper-avoid eccentric.

Continuous Washers Now Have Tensionless Speed Compensator



***TRIP-TYPE SPEED COMPENSATOR** on a continuous washer has two electric-eye units, between which the loop of cloth runs in a synchronizing position. If an increase or decrease in speed is required, the loop moves up or down to intercept the proper beam. This action causes the motor on the next tub to speed up or slow down.*

A tensionless device that automatically synchronized the speed of each tub in a continuous-washer range has been announced by Riggs & Lombard, Suffolk St., Lowell, Mass.

Cloth is allowed to hang in a free, tensionless loop between two small stainless steel reels, one of which is an idler. Whenever change of speed is needed, the cloth loop "signals" the motor of the following tub to change its rate of drive. The signal is automatically received and put into effect by the new compensator, which is available as either a contact-type or trip-type unit.

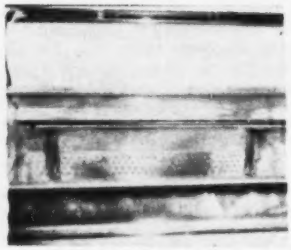
Molten-Metal Dyeing Machine To Be Manufactured in U. S.

An interim agreement arranged with Standfast Dyers and Printers Ltd. of England for Rodney Hunt Machine Co., Orange, Mass., to manufacture, for sale in the U. S. and Canada, the molten-metal dyeing machine developed by Standfast has been announced.

The molten-metal machine has been in production at the plant of Standfast Dyers and Printers Ltd. for several years. Better than 10,000,000 yd. of goods have been vat dyed commercially by this process. It is claimed that small or large yardages can be dyed with vat colors with equal ease.

The small dye bath that is utilized (slightly more than 1 gal. of dye liquor for a 60 in. machine) is said to insure even shades regardless of the speed of the machine. The equalization of pressure obtained in the metal unit itself makes possible the continuous vat dyeing of jacquard styles with assurance that both high and low portions of the fabric will be evenly dyed and free from streaks.

Variable-Height Weir



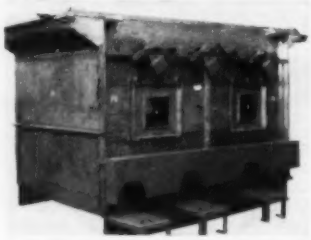
A NEW VARIABLE-HEIGHT WEIR *for the Laxloop continuous washer has been developed by Riggs & Lombard, Inc., Lowell, Mass. The Weir is part of a system designed to assure positive counter-current flow of liquor, with uniform predetermined level, in each tub.*

Vacuum-Extracting Box Gives Fabric Better Hand

A new individual vacuum-extracting machine equipped with the adjustable-slot vacuum extracting box and fitted with automatic ring-type slot seals has been introduced by Birch Bros., Inc., 32 Kent St., Somerville, Mass. The machine is built in all widths and is composed of a pair of side frames on which are mounted the tension rails, guide rolls, spiral roll for removing wrinkles, the vacuum extractor, draw rolls, and a folder. The new machine is fitted to handle cloth from roll to roll.

The machine is driven by a motor through a variable-speed unit at speeds up to 80 yd. per min. on rayons and blends, up to 100 yd. per min. on cottons, and from 35 to 45 yd. per min. on woolens and worsteds.

Ager Has Tension Control



A NEW AGER, which features tension control of fabric regardless of the number of rolls in the machine, is being offered by Cook-P&N Machine Co., Inc., 365 Dorchester Ave., Boston 27, Mass. Driven rolls can be at top on balloon and are divided into several groups, with a motor driving each group. Machines are available for desizers, continuous pad ranges, and print agers.

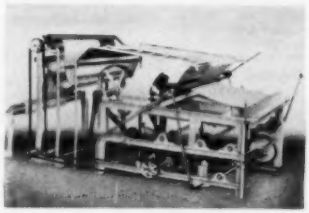
Positive Knock-Off Prevents Fabric Damage

A new positive knock-off device for use on piece-dye kettles and washers has been developed by Riggs & Lombard, Inc., Foot of Suffolk St., Lowell, Mass.

In the case of a piece-dye kettle, an improved adjustable guide rail is connected to the electric knock-off device for shutting the machine off in case of a tie-up. Because of the shape of the pins used, a positive knock-off is said to be assured.

The mechanism is said to have been thoroughly tested in numerous installations and to have proved highly successful.

Cloth Folder Has Air-Operated Clamps



DESIGN FEATURES *of this cloth-folding machine are said to cause less operator fatigue.*

A new improved cloth-folding machine has been developed by Hall and Jansson Co., 177 Highland St., Worcester, Mass. The machine has air-operated jaws for clamping the cloth and an automatic table that returns from its lowest operating position to the starting position by a reduction-geared motor drive. The folder was designed particularly for handling plissés in long cuts to manufacturer's requirements.

The standard machines are designated as No. 1, No. 2, and No. 4 low top. An overhead or high-top machine for bleached goods is also available. The manufacturer states that the machine can, if necessary, be adapted to any specific folding problem by making changes that the buyer may desire.

Dye Packages Shaped at 3,000 per Hr.

A new high-speed yarn-package shaper for breaking down the hard edges of yarn packages in preparation for dyeing has been developed by Gaston County Dyeing Machine Co., Stanley, N. C.

In the new machine, shaper cups move continuously, and it is only necessary for the operator to place the packages in the cups at the rear of the machine. The machine automatically throws out packages after the forming operation. An op-

(Continued on page 232)

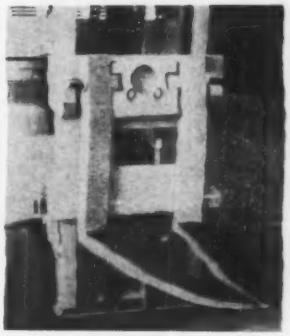
☆ For MATERIALS HANDLING

A Year of **NEW EQUIPMENT** *for the Textile Industry*

Tines of Fork Truck Can Swing Inward

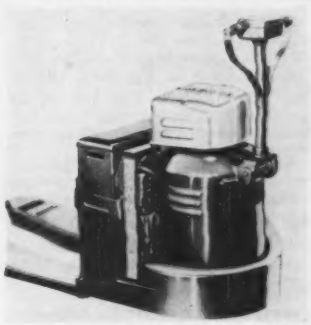
Vertically pivoted forks for use on high-lift power industrial trucks have been developed by Edwell-Parker Electric Co., Cleveland, Ohio, to meet requirements in mills, warehouses, and shipping departments where loads must be maneuvered in close quarters.

The tines can be used conventionally or adjusted for special conditions. The equipment, standard on some models, is also supplied as an extra attachment.



FOR MANEUVERING fork-truck loads in congested areas, fork tines on this truck can be pivoted inward.

Improved Electric Truck



A PACKAGED UNIT, the variable-speed drive is available at 1- to 15-hp. ratings, and offers variations from 16 to 1 to 6 at 1.

A compact, powerful, pallet-type truck built to handle loads up to 4,000 lb. has been developed by Towmotor Corp., Cleveland 10, Ohio. Among the new features of the truck is a contactor panel, a positive-action brake with fool-proof, dead-man control, improved differential action, and all-rubber dual trailer wheels.

Fiberglas Bobbin Boxes

A NEW FINISHING TRUCK developed by *Westport Fiber Corp., Westport, Mass., is molded in one piece from Fiberglas. The mold* is moisture-proof and impervious to oil, grease, and most chemicals. The trucks are said to be 60% of the weight of trucks made of conventional materials.

Ball-Bearing Turntable Made For Cloth Trucks

A new ball-bearing turntable for cloth trucks used in range with scutchers or cloth openers has been developed by Birch Bros., Inc., Somerville, Mass. The turntable is said to be of rugged construction and to turn easily on its ball-bearings that allow the truck to be turned as needed to eliminate twist.

Pallet Loader

Pallets are loaded automatically with a machine that takes packages from conveyor lines and stacks them on pallets in a predetermined arrangement and interlocking layers. The loader was developed by Alvey Conveyor Mfg. Co., St. Louis, Mo.

Table Truck Has Hard Maple Top

A NEW MAPLE-TOP TABLE TRUCK, *available with casters or legs, is being made by* Market Forge Co., Everett Sta., Boston 49, Mass. The top is made of 2-in. hard maple, jointed true and glued. Finish is natural wood, and bolts are concealed. The unit is 48 in. long, 30 in. wide, and 31 in. high.

Clamp For Fork Trucks Is Self-Centering

A hydraulically operated clamp for industrial fork trucks has been developed by Yale & Towne Mfg. Co., 11,000 Roosevelt Blvd., Philadelphia 15, Pa.

The new clamp, which has synchronized movement of arms in opening and closing, is said to eliminate unstable conditions and to make easy the carrying of loads not perfectly lined up before loading. The self-centering arms have an inside opening range of 17 to 66 in. The clamp will handle loads up to 6,000 lb.

A COTTON BALE can be picked up off-center and then rotated safely with this new clamp.

Fiberglas Roving Truck Molded in One Piece

A molded Fiberglas roving truck has been added by Westport Fibre Corp.,

(*Continued on page 236*)

☆ TEXTILE ACCESSORIES

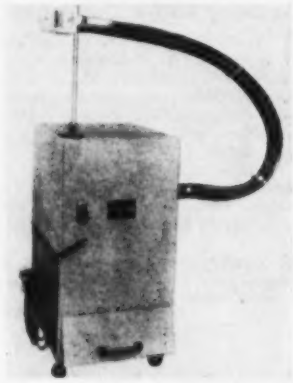
Large-Capacity Oilers Available With Gravity Feed

New oilers with capacities from 10 oz. to 2½ qt. in Pyrex glass or Lucite plastic have been announced by Trico Fuse Mfg. Co., N. Fifth at W. Chambers, Milwaukee, Wis. Designed with lock-ring or ratchet-feed adjustment, the oilers are designed to feed any predetermined number of drops per minute.

The larger oilers are particularly recommended for applications on large stationary bearings, machinery journals, conveyor-drive chains, or wherever a large quantity of oil is required. The new oilers are also good in installations where it is desirable to reduce frequency of reservoir filling.

LARGE-CAPACITY OILERS are designed for application on large bearings, journals, etc.

New Thread Trimmer



NEW DESIGN FEATURES improve the versatility and portability of this trimmer.

Versatility and portability feature a suction thread trimmer introduced by B. J. Philips Co., 110 W. 30th St., New York, N. Y. The machine, designed to work anywhere, is mounted on swivel casters.

Especially designed for low-voltage consumption, the trimmer uses only 4.2 amps. at 115 v. Various cutting blades and combs are available. The comb can be set flush or away from the blades.

Cut threads are easily removed from the lower section of the housing.

Molded-Plastic Bobbin Barrel Withstands Nylon

REPLACEABLE HEADS make possible factory restoration of damaged bobbins to standard of new bobbins.

A new molded-plastic take-up bobbin designed to withstand the crushing force of nylon yarn has been developed by Allentown Bobbin Works, Allentown, Pa.

The design of the bobbin makes possible the use of a wide variety of barrel lengths to fit practically any yarn traverse and a wide variety of flange diameters in several different flange materials.

Heads are riveted clear through the body, and it is possible to use any type or size of gudgeon. In case of damage to the heads, it is possible to return the damaged bobbin to the company and have the heads replaced. The repaired bobbins are said to meet fully the standards of new bobbins.

Leather Belt Has Controlled Stretch

A new flat leather belt with "controlled stretch" that prevents permanent elongation of the belt under load and thereby eliminates slipping has been developed by S. R. Sikes Co., 1028 S. Third St., Minneapolis 15, Minn.

The new belting combines the non-stretching advantages of fabric belting and the greater pulley grip of leather belting. Called "Cordon," the new belting is reinforced with synthetic cords placed between the leather plies by a special process perfected by the company. These cords effectively provide the added resiliency that is necessary to prevent the leather from stretching beyond a certain point under load and to return the belt to its true length when not under load.

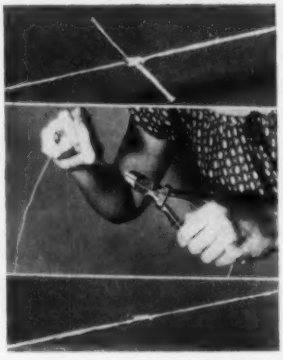
Chemical Treatment Preserves Wooden Brushes

A new chemical treatment for the wood part of wooden flat brushes has been developed by M. W. Jenkins' Sons, Inc., Cedar Grove, N. J., in cooperation with Dow Chemical Co. The treatment protects flat brushes from chemicals and moisture and is said to lengthen brush life four times.

The Lifewood treatment is said to be impervious to fungi and termites and to resist strain. Destruction of the wood to decay or rot is eliminated. The treatment penetrates the wood, fills and seals the porous cells.

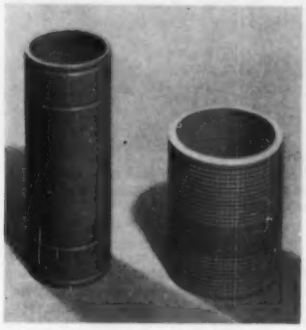
It is said that after treatment, the brush is neither injurious to the handler nor to the product, has no objectionable odor, and is non-corrosive to metals.

Knot Crusher Compresses Weavers' Knots



A PLIER-LIKE DEVICE for compressing weavers' knots to nearly the diameter of the strand has been developed by E. W. Twitchell, Inc., Philadelphia, Pa. It allows knotted yarns to pass through without snapping.

Textile Specialty Line Announced by U. S. Rubber



SPOOLER SLEEVES for Barber-Colman spoolers, available in two sizes and three colors, have excellent resistance to slipping.

WARP TUBES and cop butts are made of Uscolite rubber-plastic compound and are said to be extremely resistant to crushing.

A new line of textile-mill specialties for carding, spinning, twisting, throwing, winding, and weaving has been introduced by the Textile Specialty Div., United States Rubber Co., 1 Market St., Passaic, N. J.

1. Lap-Winder Rolls

The U. S. lap-winder roll is molded from a hard, tough Enrup compound that is highly resistant to chipping and breaking. The standard, 9-in.-long by 4½-in.-diameter roll weighs only 2¼ lb. The roll can be used on both combers and lap winders.

2. Quills

Quills are molded from a rubber-plastic Uscolite compound. They are said to be highly resistant to moisture and to retain their original shape under all conditions. They will not chip or splinter and have no tendency to soften at the tip when run through conditioning agents at temperatures under 170° F.

3. Cop Butts

Uscolite cop butts for use in duck and carpet mills are built tough to resist breaking, chipping, denting, and splintering.

4. Tapered Warp Tubes

These tubes are molded to resist abuse in thin-walled tube. They are said not to crush easily or to chip, splinter, or rough up around the ends. They hold yarn well to minimize sloughing. Because of their elasticity, Uscolite warp tubes have no tendency to telescoping.

5. Spooler Sleeves

Uscolite sleeves are supplied in both the type-A and type-C sizes for Barber-Colman spoolers. They are available in three colors—blue, gray, and brown.

6. Face-Drive Twister Spools

Uscolite face-drive twister spools are available for all types of face-drive twisters. They are recommended for all types of fibers.

7. Spinner Belting

Spinning-frame belting is made from a patented Ustex-nylon duck that features high strength and low stretch. It is furnished with either a natural-rubber or oil-resistant synthetic jacket. The jacket is put on the belt under less tension than the carcass to assure a long surface life. The jacket is not under strain when the belt is at full load. This spinner belt is recommended for all types of up-twisters, ring twisters, winders, and Rockwood drives.

8. Take-Up-Roll Covering

Pyramid roll covering is manufactured for use on all makes of looms and is recommended for use on all types of fabrics except sateens. Traction-Top roll covering is designed and compounded to give excellent holding qualities and long life. It is recommended for use on all makes of looms and for various types of materials. Acetate-Resistant covering has the pyramid design and is specially compounded for use in mills using acetate warps. All the roll covers are available in 2-, 3-, or 4-in. widths and are put up in 100- and 250-ft. rolls.

9. Spindle-Bumper Tubing

This material is furnished in four different sizes to fit spindle-bumper rods. It is compounded to be oil resistant and to have long life. It is recommended for use on all box-type looms. Another feature of this tubing is that failure, when it occurs, is complete. There is no tendency to fail gradually, thereby requiring adjustments on the loom as it is in use.

10. Loom Bumpers

The company line of bumpers is manufactured from a special compound that was developed to give excellent loom performance and long life. Stock is supplied in large slabs that are cut to size by the user to show considerable savings. These bumpers are used on all types of box looms.

11. Presser-Roll Tubing

The tubing, which is used on the presser roll on all types of looms, is supplied with 3/16-in. wall thickness and any specified inside diameter, either in loom widths or continuous roll lengths. It is resistant to dyes, oils, and acetate and is produced from a very tough compound that enables it to give years of use without replacement.

12. Warp-Compressor Roll Covering

U. S. warp-compressor roll covering is recommended especially for rolls on special applications and as a cover for rolls on inspection tables. It is available in widths of 2 or 3 in. in 250-ft. rolls. Thickness is approximately 1/16 in.

13. Loom Strapping

U. S. loom strapping is furnished as either a rubber or neoprene compound and has an exceptionally good flex life, which in turn is claimed to give the strapping an extremely long life. It can be supplied in any width as ordered and is available in continuous roll lengths as required.

14. Winder Pads

This item is new to the industry and has proved very satisfactory for use on model-101 and -102 Foster winders, where it is applied at the base of the spindle.

15. Winder Tires

Winder tires are made in two standard sizes for the Abbott winder, models 62 and 64. Other sizes for other type winders may be ordered to specification.

"Spike" Traps Tramp Iron

A new spiked-apron magnetic separator has been announced by Eriez Mfg. Co., Erie, Pa. "Spike," as the separator is called, halts tramp iron in processing lines. The magnets themselves, of Alnico V, have high pulling power.

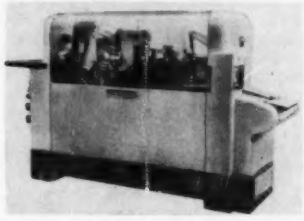
The new separator is available in sizes to fit any feeder.

Stroboscope Designed For Loom Study

The Stroboloom, a high-intensity stroboscope specially designed for viewing the moving shuttle of a loom, has been developed by Dawe Instruments Ltd., 120 Uxbridge Road, Hanwell, London W. 7, England. The flash tube of the stroboscope gives an intense flash of white light of very short duration exactly synchronized with each cycle of the loom, thus giving a visual effect of "freezing" the movement. The lamp is synchronized with the machine motion by a contactor fitted with a remote control so that the shuttle may be viewed stationary at any desired position.

THE STROBOLOOM is a portable unit and small enough to be used in loom alleys. ➡

Stockings Packed and Labeled Mechanically



TWENTY TO THIRTY STOCKINGS per minute can be automatically packaged in cellophane bags and labeled by this new automatic stocking packer.

The Whitehall stocking packer, designed to mechanize the operation of inserting stockings into cellophane packets, has been developed by Strachan & Henshaw Ltd., Bristol, England. The machine will also fold the packets and secure them with a self-adhesive label to make an attractive unit package.

The machine uses cut-off bags (without lip or flap), either plain or printed, in a size of 6¾ to 7¼ in. in width by 7 in. 1/16 in. in length. The machine will pack stockings that can be "short folded" to a length of 9½ to 10 in.

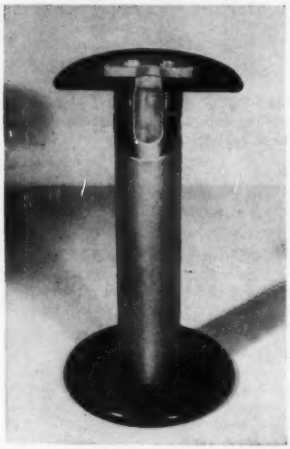
The machine can handle fine-gauge nylons as well as heavier stockings. Pieces of paper or very thin cards can be inserted into the bag with the stocking if suitably folded into the stocking previously.

Stockings are fed into the machine by an operator who places them on intermittently moving belts during the stationary period. Bags are placed in the hopper prior to the beginning of a run. The hopper holds about 500 bags.

Packets of stockings are delivered in counted piles of 12. The delivery operator inspects the packages and packs them into boxes.

The machine occupies a floor space about 9 ft. by 2 ft. 9 in. in size and stands about 5 ft. high. The feed is arranged for an operator sitting on a normal chair.

Twister Spool Said To Be Indestructible

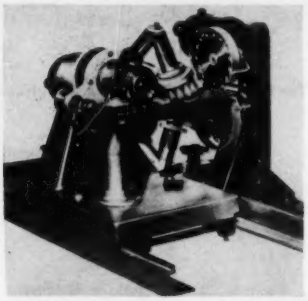


THE SPINDLE SLEEVE of this new twister spool is statically and dynamically balanced to reduce spindle-bearing maintenance.

A new twister spool said to reduce vibration, hold more yarn, and to reduce spool- and spindle-bearing maintenance cost, has been developed by the Akron Spool & Mfg. Co., P.O. Box 142, Cuyahoga Falls, Ohio. The new spool has the following features:

1. Spool ends are reinforced, smoothly finished, durable, and replaceable.
2. A swaged spindle sleeve provides spindle clearance and eliminates binding.
3. Precision resistance welds are used in several places for added strength.
4. An inverted retainer plate gives great rigidity and holding power.
5. Special, heat-treated, rust-proof screws hold spool assembly together.
6. Cylinder barrel is made of welded, rust-proof, plated steel tubing.

Selvage Trimmer Follows Edge Closely Without Damage

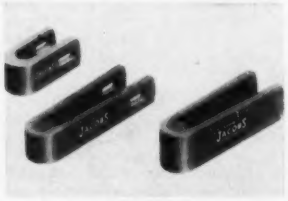


GARA SELVAGE-TRIMMER can be used with existing machines or attached to a special rerolling machine.

A trimming machine that cuts filling threads from the selvage of cloth being unrolled has been developed by Muschamp Taylor Ltd., Vulcan Works, Pollard St., Manchester, England.

The cloth passes between guide plates on the trimmer head. Two rapidly rotating brushes, placed above and below the cloth, insure that every trailing end of filling is taken beyond the edge of the cloth and laid in position—at an angle of 90° to the cloth—to be cut by the rotating circular knives. The loose ends are then removed by suction to a conveniently placed receptacle under the machine.

Lug-Strap Uniformity Said to Insure Better Weaving



NEW LUG STRAPS of rubber- and cotton-fabric composition are said to provide longer service.

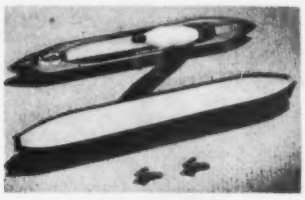
A complete line of rubber- and cotton-fabric composition lug straps, called Verybest Rubberweld lug straps, has been developed by The Bullard Clark Co., E. H. Jacobs Northern Div., Danielson, Conn.

Because of the molded construction of the lug straps, they are more uniform than other straps made of rubber and fabric. When installed on a loom, their uniformity is said to provide stable picking action; and their molded construction assures fewer loom adjustments and longer uninterrupted service.

Coated Shipping Drum Holds Moisture in Products

SHIPPING DRUMS made of fiber and coated on the inside with geon latex are available from Virginia Barrel Co., Chester, Pa. The coating is said to protect products from grease penetration and to prevent loss of moisture content during shipment.

Shuttle-Bonding Gives Longer Shuttle Life



CURING TIME for glue used in bonding fiber to wood shuttles is reduced to 90 sec. by electronic dielectric heating.

Weaving shuttles, traditionally made of dogwood or persimmon wood for high impact strength and retention of smooth contours for long periods of continuous operation, are said to have longer life if surfaced on two or more sides. Surfacing is done with a hard fiber sheet on electronic dielectric-heating equipment made by Westinghouse Electric Corp., 306 Fourth Ave., Pittsburgh 30, Pa.

The new technique uses stray-field heating, with electrodes embedded in rubber on the surface of thick rubber dies. The glue line is heated to polymerize the thermosetting plastic glue used with the new process. A radio-frequency generator supplies the required dielectric heat. A standard steel die set, used in a hydraulic arbor press, makes up the upper and lower platens on which are mounted the electrodes and rubber dies.

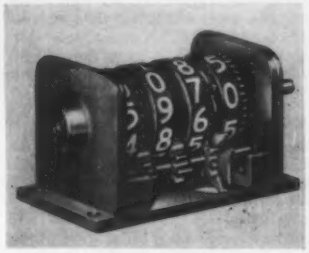
The total curing time required is only 90 sec., compared with previous methods requiring 4 hr. or longer. More than one shuttle can be bonded at the same time.

Glue savings of up to 75% have resulted, since the new technique requires less glue.

Improved Weavers' Scissors

Flat points and curved blades feature new scissors made available for weavers and knitters by Robert Viegelmann, 4 Theresa Place, Staten Island, N. Y. A full line is available.

High-Speed Counter Counts 15,000 Per Min.



FIGURES MORE THAN ¼-IN. high are one feature of this new high-speed counter, which is available in any figure capacity.

Higher speeds than ever before available in a mechanical counting device are claimed for a new series of counters announced by Veeder-Root Inc., Hartford 2, Conn. The counters, incorporating the high-speed Geneva transfer, are rated at 1,500 drive-shaft rpm. This rating gives 15,000 counts per minute with a standard 10-digit wheel.

Cake Holder and Flyer Increase Winding Production

An expanding cake holder, together with a suitable flyer, developed by Manchester Metal Works Ltd., 368 Bury New Rd., Salford 7, Manchester, England, is said to provide an average increase of 27½% in the poundage of yarn wound per week as compared to previous methods.

The increase in output is attributed to the rapid method by which the expanding holder can be closed, placed in a new cake, and opened up; the quick method by which the assembly can be mounted on the flyer; and the gentle unwinding action of the flyer that prevents every turn of the yarn being dragged over those adjacent to it. The latter feature is also said to result in a lower percentage of breaks.

The holder can be closed with one movement of the hand and is ready for further use immediately. The flyer is provided with a threaded portion at one end, 1 in. long, complete with nut, so that it may be mounted vertically, horizontally, or at an angle on wood or metal bars by drilling a single hole. The flyer portion itself is hardened and runs on two ball races.

Static-Electricity Neutralizer Prevents Shocks to Operators

OPERATOR SAFETY is stressed in the design of this static-neutralizer bar. Human touching of points or connections will not produce a shock, the company says.

A new static-electricity neutralizer, said to be effective and safe, has been developed by Herbert Products, Inc., represented in the U. S. and Canada by American Textile Engineering, Inc. Arlington, N. J. The new redesigned device is called the Oxy Neutralizer Cold Bar. The Cold Bar features intense ionization from its emitter points, but is said to be free from shocks, stings, and sparks from the points.

The safety features of the Neutralizer have been given great consideration in the design of the equipment from the transformer to all parts. It is so designed to have high impedance to limit the current flow in the secondary not to exceed 2 m.a. This current is far below the danger level so no shock is possible to personnel.

Bobbin Finish Reduces Warping and Snagging

A new finish developed by New England Bobbin & Shuttle Co., Nashua, N. H., for its automatic loom bobbins is designed to withstand temperatures up to 125° F., chemicals used in detergents, and more-than-ordinary hard use. The new finish is marketed under the name Long-Life. The finish is said to remain smooth and clear of damage far longer than conventional finishes, and to aid in preventing warpage of bobbins since it does not absorb moisture, according to the manufacturer.

Improvements Made in the Electronic Metal-Detector

Mechanical and electronic improvements on the RCA electronic metal detector have been announced by Eriez Mfg. Co., Erie, Pa. sole domestic and Canadian distributor. The RCA metal detector is an automatic inspector that warns of the presence of all magnetic or non-magnetic metals or alloys regardless of their depth in the material. Particles as small as 39 thousandths of an inch in diameter have been detected.

The main tie-bolts between the two

(Continued on page 241)

☆ *For* REGULATING, MEASURING, TESTING,

Specific-Gravity Instrument Gives Direct Readings

SPECIFIC GRAVITY, an important factor in several finishing processes (such as mercerizing, for example), can be read directly from the scale of this instrument. The measuring element is totally submerged.

A new direct-reading Densitrol specific-gravity measuring device has been announced by Precision Thermometer & Instrument Co., 1400 Brandywine St., Philadelphia 30, Pa. The new device is designed to eliminate the error caused by liquid and gas interface in the usual hydrometers. This instrument can be used for periodic checks of liquid density and also where process peculiarities prevent drawing samples from the system.

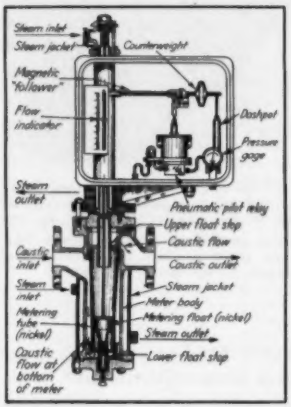
The instrument operates as a by-pass in any liquid line or vessel, and specific gravity may be read directly as required. Models are available with or without a thermometer, calibrated directly in terms of temperature correction, that is mounted directly on the chamber. Instrument is suitable for high- or low-temperature or vacuum service.

Meter for Caustic Soda Is All-Nickel

An all-nickel variable-area flow meter designed especially for handling caustic streams is now available from Fischer & Porter Co., Hatboro, Pa. All parts of the meter in contact with the fluid are constructed of nickel. A steam jacket surrounds the liquid passages through the meter, which is available in sizes ranging from ¼ to 300 gal. per min.

One feature of the meter is the fact that its one moving part, the flow-sensitive float, is entirely confined within the liquid stream, with no bearings or seals in the system. Float movement (linear with flow rate) is picked up by means of a Magnabond magnetic follower and translated into air-pressure changes (linear with flow rate) for transmission to remote receiver.

ONLY ONE MOVING PART is used in this nickel flow meter for handling caustic solutions.



New Tachometer Monitors Speeds of Many Machines

THIS TACHOMETER can be located up to 1,000 ft. from any of the several machines whose speed it can register.

Speeds of many machines can now be measured from one location with a new tachometer announced by Metron Instrument Co., 432 Lincoln St., Denver 9, Colo. Over 50 standard, full-scale range markings are available. Various heads can indicate speeds from 0.1 to 100,000 rpm. Any desired unit—rpm, ft. per min., yd. per hr.—can be indicated. No speed-changing drives are necessary.

Viscometer Is Explosion-Proof

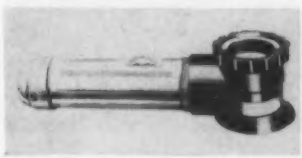
A NEW MEASURING ELEMENT that meets Class 1, Group D requirements for explosion-proof applications is now available for the Norcross Viscometer, manufactured by Norcross Corp., 247 Newtonville Ave., Newton, 58, Mass. The measuring element can be furnished with a recorder to provide viscosity process control either for manual operation with alarms, or for completely automatic controls.

AND CONTROLLING

Folding Stirrer Blades For Narrow-Neck Flasks

A NEW STIRRER with 4-in. propellers has been developed by Fisher Scientific Co., 717 Forbes St., Pittsburgh, Pa. The four blades on the stirrer can be closed to pass through the neck of a flask and then opened for maximum stirring effectiveness. The 12-in. long shaft of the stirrer fits into chucks of any motor device that fits ¼-in. rods. The umbrella-type stirrer is said to be particularly valuable for use with a 3-neck flask when a minimum of exposure to air is desirable.

Illuminating Magnifier Improved



MAGNIFIERS complete with light are available in 7- to 40-power models. They incorporate a lens system that gives clearer vision.

An improved Flash-O-Lens combined magnifier and light has been announced by Abbeon Supply Co., 58-10 41st Drive, Woodside, N. Y.

The instrument combines a seven-power magnifying glass with a powerful light built into the handle that illuminates the magnified field of vision without throwing direct rays in the user's eyes.

In this model, a new Bausch & Lomb lens system has been incorporated to give a clearer, flatter field of vision and to reduce distortion and aberration.

Hygrometer Has Highly Sensitive Sensing Element

A new electronic hygrometer for measuring and controlling industrial air conditioning has been developed by Brown Industrial Div., Minneapolis-Honeywell Regulator Co., 4468 Wayne Ave., Philadelphia, Pa. A number of the controllers, operating under tests in several Southern textile mills, are said to have reduced yarn breakage and to have materially improved the quality of finished products.

Part of the new instrument is a sensing element that is about the size of a match-book cover. The element consists of a clear plastic base on which are mounted conducting electrodes that look like the teeth of a comb. The electrodes are made of pure gold leaf and are pressed onto the surface of the plastic base. They are separated from each other about like the teeth of two interlocked combs. The entire element is coated with a thin solution of chemical salts.

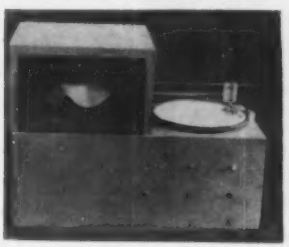
In operation, the sensing element determines the amount of moisture in the air by measuring a minute sharp change in electricity carried by the salts between the teeth of the electrode.

The salt film carries a higher current as moisture increases. The electric change in the element is amplified through electronic tubes. The amplifier of the system operates equipment to add or to take moisture from the air in accordance with the humidity desired. The controller can also be connected to indicating and recording instruments to show visibly the humidity at all times.

The system can be used to sense changes between the limits of 20 and 93% relative humidity.

SMALL SENSING ELEMENT of new electronic hygrometer has gold-leaf electrodes pressed into a plastic base. The entire element is coated with a thin solution of chemical salts, the conductivity of which varies with relative humidity.

Instrument Measures Drape By Projection Method

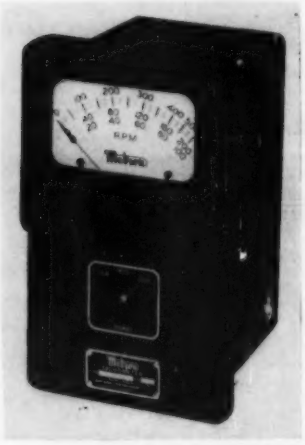


A SCANNING PHOTOCELL moves around the edge of a draped sample (left) and causes an integrator (right) to measure area of projected drape in relation to full size of sample. Drape value is given directly.

A new instrument for measuring the drape of fabrics, the F.R.L. Drapemeter, has been developed by Fabric Research Laboratories, Inc., 665 Boylston St., Boston, Mass. In brief, the Drapemeter measures "drapability" by measuring the area under a sample draped over a circular disk in relation to the area of the sample laid flat.

A 10-in. circular sample of fabric to be tested is centered on a 5-in. disk and a 5-in. disk is laid on top of the lower disk and fabric. A scanning photocell then moves around the edge of the draped fabric, positioning itself automatically and continuously at the edge. When one revolution of the cell has been completed, a pen connected to the scanning unit will have charted an accurate vertical projection of the draped sample. The relation of the area drawn to the full sample area gives a measure of fabric drape. An integrator can be used instead of a pen to give a direct drape-value reading.

The instrument tests drape in three dimensions, a task impossible with previous drape-measuring methods, which were basically distortion tests. A wide variety of fabrics can be tested, and the autographic diagram kept as a record. Time required for testing is short, and reproducibility is excellent.



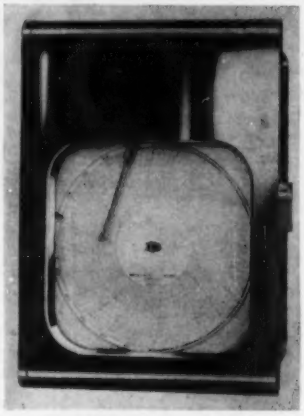
New Speed Indicator Has Wide Range

A new, three-range, single-head, fixed-installation indicator has been announced by Metron Instrument Co., 432 Lincoln St., Denver 9, Colo. Designed for speed-measuring applications where a wide range is desired, this new instrument, Series 42p, can be used with any series Metron tachometer head.

Scales are supplied for direct reading in any units such as ft. per min., in. per sec., or in any quantity that is proportional to the speed actuating the head. Various tachometer heads permit direct-measurement ranges from speeds between ½ rpm. and 100,000 rpm. without requiring a speed-changing drive of any kind.

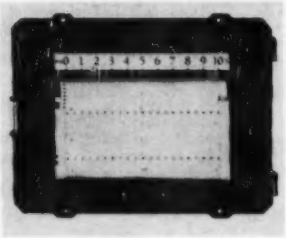
ROTATION OF THE RANGE KNOB of this new tachometer instantly selects one of three speed ranges to measure any speed over a total range of 50 to 1.

New Running-Time Recorder Developed



A NEW LINE OF RUNNING-TIME RECORDERS has been announced by The Bristol Co., Waterbury 20, Conn. The recorders chart the operating or "on" time of production machinery and other similar equipment. "Time-off" periods are also shown on the chart. The recorder magnifies the running-time readings so that the total operating time of a machine can be easily and accurately determined to within a few seconds.

Stretch Meter Records Speed-Ratio Changes

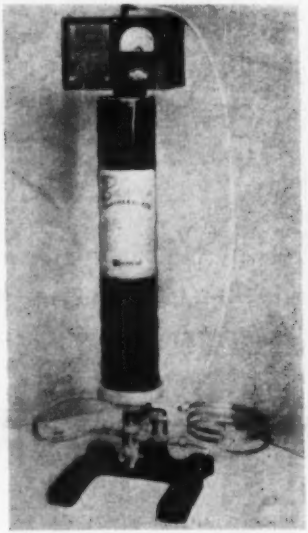


***CHANGING SPEED RATIO* of two rolls is indicated and recorded by this new recording speed-ratio tachometer that is calibrated in terms of percentage shrinkage or stretch of the material passing through the rolls.**

The percentage stretch or shrinkage of materials being processed through pairs of rolls turning at different speeds is indicated and automatically recorded by the new Tag-Weston recording speed-ratio tachometer, developed by the Tagliabue Instruments Div., Dept. 414, Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark 5, N. J.

Operated by two Weston Model-724 tachometer generators driven by the respective rolls, the new instrument consists essentially of a specially developed Tagliabue Model-47001 Celectray ratio recorder. The ratio meter and recorder can be calibrated in percent stretch as in yarn processing, inches-per-yard shrinkage as in Sanforized shrinking, percentage reduction, or in other units that are functions of the speed ratio between two rotating members. Various calibration ranges and chart graduations are available.

Demineralizer Has Direct-Reading Meter



WATER PURITY in parts per million and in ohms of electrical resistance is given directly on the meter attached to this lab-sized demineralizer.

Improvements on the Bantam Demineralizer made by Barnstead Still & Sterilizer Co., 2 Lanesville Terrace, Forest Hills, Boston 31, Mass., have been announced. The direct-reading meter tells the purity of the water at any time and maintains a purity check on the flow of demineralized water. A needle-type regulating valve for flow adjustment, a drain valve, and a base are also provided.

Instrument Tests Shuttle Tension

UNIFORM TENSION in all shuttles can be obtained by means of this shuttle-testing and adjusting device. Tension is indicated in grams.

A new shuttle-tension tester has been developed by Saxl Instrument Co., Harvard, Mass. The new test board is designed to provide a simple means for measuring and adjusting yarn tension as the yarn leaves the shuttle under conditions similar to loom operation.

The tension meter shows the tension on the yarn as it leaves the shuttle, in grams. An adjusting device in the shuttle permits suitable adjustments to be made to produce the best tension for each shuttle. The Saxl tester is said to be precise and simple and can operate from a light outlet.

Tensile-Tester Jaws Have Greater Gripping Efficiency

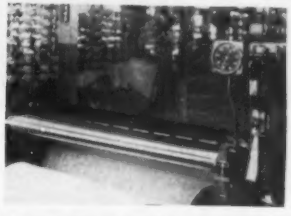
JAW BREAKS are said to be minimized by the design of these new self-aligning tensile-tester jaws.

Increased gripping efficiency, resilient follow-up action, self-alignment of gripping faces, and positive tightness of gripping surfaces in the direction of the pull are features claimed for new jaws developed by Instron Engineering Corp., 2 Hancock St., Quincy 71, Mass. The jaws can be adapted to any tensile-testing machine.

The resilient follow-up action is made possible by nylon members that maintain uniform pressure on the sample during the test. The normal loss, or decay, of gripping during the test that would result from slight changes in thickness of the material between faces as the sample is stretched, is greatly diminished by the follow-up action, it is claimed.

Increased gripping efficiency is obtained by the design of the faces of the new Instron jaws. Both faces are automatically self-aligning, through a universal-type action. Motion of the gripping surface in the direction of pull is positively restrained.

Tachometers for High-Humidity Areas



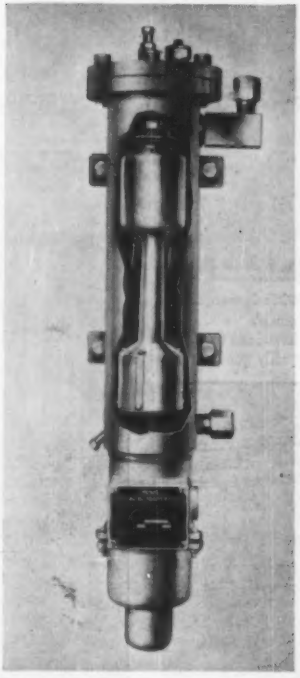
MARINE-TYPE TACHOMETERS, which high humidities don't affect, are now available from Jones Motorola Corp., Stamford, Conn. The watertight tachometers, such as the one shown above on a warper, do not become corroded in moisture-laden atmospheres.

Auxiliary Lens Permits Close-Ups of Fabric

A new 10-diopter slip-on auxiliary lens for making top-quality close-up photographs of fibers, fabrics, weaves, and print details, is now available from the Tenplus Co., 43A Garden Drive, Roselle, N. J. The auxiliary lens can be fitted to any camera that accepts a series 5 or 6 adapter ring.

The new lens permits working closer than 4 in. from camera to subject matter. Price of the supplementary lens is $8 for either series size.

New Flow Meter Available In Three Ranges



EVENLY GRADUATED, this flow meter is supplied in three ranges and for 750 and 1,500 psi. static pressure.

A new flow meter has been developed by Brown Instrument Div., Minneapolis-Honeywell Regulator Co., Philadelphia 44, Pa. Available either as a mechanical flow meter with integral recorder, or as an electrical transmitter to be used with an inductance bridge receiver, the flow meter is of the differential type.

The new meter is supplied in three ranges: 53, 119.25, and 212 in. of water, and for 750 and 1,500 psi. static pressure. The three ranges are slightly greater for dry calibration.

Control Settings Locked by New Cover Design

UNDER LOCK AND KEY—the new lock cover on the TAG non-indicating controller for temperature-pressure saves time, money, and labor by locking—in control—point settings and preventing tampering. Only the man with the key can get in to regulate the control by turning a screw driver in the slotted spindle once the cover is unlocked.

A new cover lock for the TAG non-indicating controller has been announced by TAGliabue Instruments Div., Weston Electrical Instrument Corp., 614 Frelinghausen Ave., Newark 5, N. J. The new feature eliminates possible financial, labor, and time losses that might be caused by tampering.

In the new design, the control-setting mechanism is a spindle with a slotted tip placed entirely behind the locked cover of the case. Adjustment of the control is made by unlocking and removing the cover, inserting a screw driver in the slot of the spindle, and turning in the desired direction.

The instrument, known as model 8352, type 1, is available for either direct- or reverse-acting control applications and operates on the same principle as the previous TAG model. It measures 5¾ in. by 7¾ in.

Lint-Resisting Starter Has No Knockout Holes

A new Life-Linestarter, available in NEMA sizes 1 to 5 with ratings up to 200 h.p., 440-v. polyphase, has been announced by Westinghouse Electric Corp., Box 2099, Pittsburgh 30, Pa.

The breaker is operated by a slam-proof, self-indicating external handle, but the enclosure must be opened to reset overload relays, which brings motor overload to the authorized person's attention.

The starters are furnished as standard with a 220/440-v. primary, a 110-v. fused secondary, and a control circuit transformer that can be used on either 220- or 440-v. supply voltage 50 or 60 cycles.

SUNOTEX SLASHES SIZING COSTS

SIX YEARS AGO a New Hampshire mill used an emulsifiable oil, a penetrant, and a preservative in the softener for sizing viscose and acetate warps on Johnson slashers. The three size components were expensive, and either had to be dissolved separately or heated before mixing. Moreover, uniformity of the sized warp could not be counted on. A Sun representative suggested all three oils be replaced with "Job Proved" Sunotex RSO-48. Result: an immediate 25 percent reduction in formula costs alone, *plus* new ease in mixing and dependable sizing.

CURRENT PRODUCTION is marquisette for curtains, taffeta for women's wear. Fortisan and Nylon warps, too, have been sized with Sunotex RSO-48—with equally good results.

SUNOTEX RSO-48 SPEEDS WEAVING by protecting ends from breakage by shuttles and preventing build-up of static electricity. It boosts quality by reducing "snowballing" of filaments.

THE MILL CREDITS SUNOTEX RSO-48 for much of its reputation for product quality. In finishing, it scours readily and uniformly from fabric, gives even dyeing—makes production better right down the line.

Sun has the right "Job Proved" textile-process aid for every material, every operation.

For the help of a Sun technical representative, call or write the nearest Sun Office.

SUN INDUSTRIAL PRODUCTS

SUN OIL COMPANY, PHILADELPHIA 3, PA. • SUN OIL COMPANY, LTD., TORONTO AND MONTREAL

SUNOCO

Device Measures Evenness of Low-Twist Filament Yarn

THE ROTAFIL, shown here in conjunction with the Brush Uniformity analyzer, measures evenness of low-twist filament yarns by twisting the yarn within the pick-up element. The device can be adapted for use with at least three yarn-evenness testers commercially available.

A new device, called the "Rotafil", has been developed by Textile Research Dept., American Viscose Corp., Marcus Hook, Pa., to measure accurately the evenness of low-twist filament yarns. Heretofore, yarns of low or zero twist could not be accurately measured, both because they tended to flatten as they passed over the guides, and because their shape varies naturally from circular to flat.

The Rotafil unit twists and rotates the yarn as it measures it, then removes the twist. Twisting is done by use of a simple false-twisting tube with accurate guides. In this way, the form factor is eliminated by increasing the number of flats and edges in the pick-up area and by keeping the number constant through rotating the yarn on its axis.

The device is applicable to at least three makes of testers: the Uster evenness tester, the Brush uniformity analyzer, and the Serc electron micrometer.

Rotafil is being offered to the textile trade on a non-exclusive royalty-free basis as a contribution of American Viscose Corp. toward the maintenance of quality standards in the textile industry.

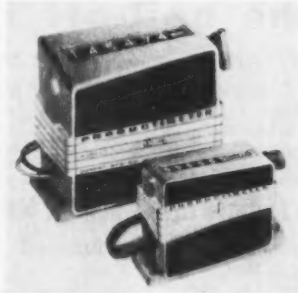
Metal Containers Available For New Washfastness Test

New specimen containers for the AATCC No. 3A tentative accelerated washfastness test have been announced by Atlas Electric Devices Co., 361 W. Superior St., Chicago 10, Ill. The unbreakable containers are to be mounted horizontally at right angles to the shaft and are designed for use in any standard- or research-model Launder-Ometer.

Easy-Positioning Device For Heavy Lab Equipment

IMPROVED POSITIONING DEVICE called Lab-Lift has been developed by Fisher Scientific Co., 717 Forbes St., Pittsburgh, Pa. The device has a platform that can be adjusted to any point from 11½ to 18½ in. above the workbench by turning a screw support to which the platform is attached. This laboratory aid is more stable and easier to operate than previous models or makeshift devices. Heavy kettles, reaction flasks, cold or hot baths and similar vessels are held safely, moved up or down, and removed easily.

Two New Electric Counters For High-Speed Operations



ELECTRIC COUNTERS are available in two sizes. The smaller operates at a speed up to 1,000 counts per min., the larger up to 800.

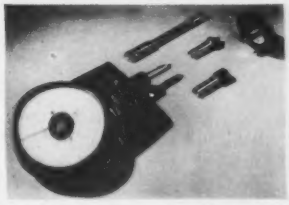
Two new electric counters have been developed by Durant Mfg. Co., 1931 N. Buffum St., Milwaukee 1, Wis. The smaller model, called the "Y" Electric, is for light applications where reading is done at close range. The larger unit, "CS" Electric, for heavy industrial applications, features larger figures for distant reading. Speed ranges are up to 1,000 counts per min. for the smaller type and to 800 per min. for the larger type. Standard voltage for both is 110 v., 60 cycle a.c.

Recorder Measures Rotor Temperature

An electronic recorder for accurately and quickly measuring temperature of the rotor in large electric generators has been developed by Minneapolis-Honeywell Regulator Co., Brown Instruments Div., Philadelphia, Pa.

The recorder, designed to assist in avoiding overloads, furnishes a 12-in. strip-chart record that can be used as a guide for gradually cooling a generator.

Hand Tachometer Features Low Torque



SPEED READINGS over a range from 0 to 5,000 rpm. are guaranteed accurate to 0.5 of 1%.

A new dual-range hand tachometer, Smiths model A.T.H. 10, featuring extremely low torque, 0.40 oz. in. on lowest range, is available from Equipoise Controls, Inc., 100 Stevens Ave., Mount Vernon, N. Y. Ranges are 0 to 1,000 rpm. and 0 to 5,000 rpm. Each range is printed on the dial in a contrasting color. A revolving Alnico permanent magnet inside of drag cup assures extreme sensitivity and accuracy over the entire scale range. Accuracy of 0.5 of 1% over the entire scale range is guaranteed.

Instrument Said to Measure Fabric Radiant-Heat Loss

RADIANT-HEAT LOSS of fabric is measured by the caloric-visitherm and porophorometer, a new instrument, according to James H. Rand, III, Cleveland scientist, and Deering, Milliken & Co. It is available generally to the textile industry from Deering, Milliken & Co., New York, N. Y.

Singe | *Boil-Off* | *Mercerize* | *Bleach* | *Finish* | *Sanforize*

50 yards per minute

and the boil-off is right

The Butterworth Progressive Boil-Off Machine meets today's demand for open-width processing of government drills and twills. Production of a 10-compartment model is 50 yards of 2.85 goods per minute. Built with 6, 8 or 10 beams. Roll widths vary from 44 to 72 inches. Choice of squeeze arrangements. In the 10-beam machine, illustrated, each yard of goods is in the machine for 3½ hours. There is a 2-ton squeeze after the 2nd and 6th beams, and a 4-ton extraction after the 10th beam.

√ Check these features of the Boil-Off Machine

Open and closed steam coils in each compartment. Controls may be added to maintain boil.

No streakiness caused by uneven boiling

No creasing to cause rejects

Puts the fabric in condition to take a clear, even bleach

Easy transfer from beam to beam without reaching over boiling liquor

Drain valve and skimmer overflow in each compartment

Bulletin on request.

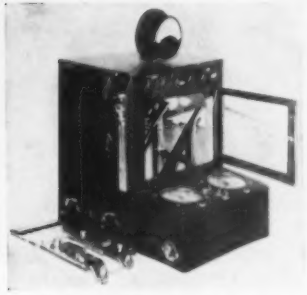
H. W. BUTTERWORTH & SONS CO., BETHAYRES, PA.
187 Westminster St., Providence, R. I. : : 1211 Johnston Building, Charlotte, N. C.
Representatives in Principal Cities of the World

BUTTERWORTH

Short-Interval Timer
For Automatic Control

A SHORT-INTERVAL ELECTRONIC TIMER that meets specifications of NEMA Class-1A non-synchronous timers has been developed by Photoswitch, Inc., 77 Broadway, Cambridge 42, Mass. The timer, which covers a range of 3 to 120 cycles, can be used with either 115- or 230-v. a.c. supply.

Flammability Tester
For Textile Uses



IGNITION AND BURNING rates are measured automatically with this flammability tester, which also indicates ease of putting out the burning.

A flammability tester developed by the Society of the Plastics Industry is now available from Custom Scientific Instruments, Inc., P. O. Box 170, Arlington, N. J. The tester was designed to measure relative flammability of sheet materials, including textiles, from 0.001 to 0.250 in. thick, or more.

Combustible samples are tested by sliding the specimen holder with sample into the cabinet. When the sample reaches test position, it contacts igniting flame and simultaneously starts a timing clock. Ignition and burning rates are measured automatically.

A thermocouple mounted in the flame registers the intensity of heat on a pyrometer during the same operation. Ease of extinguishment can be judged on the same sample. Greater degrees of severity can be applied to flame-resistant materials.

Wide-Field Microscope
Designed for Fabric Analysis

BINOCULAR MICROSCOPE is available in both high-power low-power models.

A special wide-field binocular microscope with an attachment to simplify the counting of ends and picks in fabrics has been developed by George Scherr Co., Inc., 200 Lafayette St., New York 12.

Three templates, ¼ in., ½ in., and 1 in. square, are furnished with the microscope. A pointer or indicating finger attached to a precision slide with a screw is moved along the cloth from end to end making the count of the finest weave possible without error. The image is fully erect and corresponds to the actual movement right or left, up or down. The microscope permits examination of a comparatively large section in various magnifications, according to requirements.

Two types of microscopes are available.

Filling Tension Checked
By New Testing Unit

SHUTTLE-TENSION STANDARDS can be set and used by means of this testing unit. Up to 300 looms can be checked per hour.

A new machine for testing tension exerted on filling yarn by shuttles and tensioning devices has been developed by J. Raymond Fish, Wm. R. Barringer Hotel, Charlotte, N. C. Yarn tension build-up caused by changing from one-sized package to another, or by shuttle fur, can be accurately measured. The device is said to be helpful in adjusting the set of shuttles used in a box loom.

The machine is portable and can be brought to the loom for checking tension of shuttles. The maker states that shuttles in up to 130 single-shuttle looms can be checked per hour. Savings in check straps, pickers, shuttles, and other loom parts are claimed in the use of this machine.

Instrument Measures Bobbin Unbalance

A new instrument, the dynamic-balance indicator, which permits bobbin-unbalance measurements to be made accurately, quickly, and inexpensively within the mill, has been developed by Atwood Div., Universal Winding Co., Providence, R. I.

The dynamic-balance indicator has two spindles that can be driven alternately at normal spindle speeds and an electronic system of measuring the unbalance of the bobbin.

Spindle-bolster vibration caused by bobbin unbalance is picked up by a coil and converted into an electric current. This current, amplified by an electronic circuit, indicates the degree of bobbin unbalance on a meter in the face of the instrument.

INSTANTANEOUS READINGS of the degree of bobbin unbalance can be obtained by this electronic instrument designed for use by mills.

better hand...quicker sale

Mrs. America may not know what you mean by "a better hand," but she seldom buys a piece of yard goods without first making sure that it "feels right."

Santomerse No. 1, employed as your detergent in scouring after dyeing, helps you produce textiles that feel *right* and sell *quickly*. It helps you get a "better hand" because it prevents the formation of lime soaps that cause harshness.

"A better hand" is only one of the advantages of using Santomerse No. 1 in scouring after dyeing. After vat dyeing in continuous units, for example, acid-resistant Santomerse No. 1 makes less alkali necessary to neutralize the acid carry-over. It reduces crocking because it washes away all unattached dye pigment. It aids in level dyeing and leaves colors free of film and *bright*.

Santomerse No. 1 is an alkyl aryl sulfonate, with a minimum of 40% active ingredient. It is a rapid wetter and penetrant and a highly efficient detergent. Santomerse No. 1 rinses out quickly and thoroughly. It is efficient in hard or soft water, in hot or cold solutions, in acid or alkaline baths.

For information on the use of Santomerse No. 1 in any textile operation requiring a penetrant or detergent, contact the nearest Monsanto Sales Office or write MONSANTO CHEMICAL COMPANY, Phosphate Division, 1700 S. Second Street, St. Louis 4, Missouri.

Santomerse: Reg. U. S. Pat. Off.

DISTRICT SALES OFFICES: Birmingham, Boston, Charlotte, Chicago, Cincinnati, Cleveland, Detroit, Los Angeles, New York, Philadelphia, Portland, Ore., San Francisco, Seattle. In Canada, Monsanto (Canada) Ltd., Montreal.

MONSANTO
CHEMICALS — PLASTICS

SERVING INDUSTRY . . . WHICH SERVES MANKIND

Gas Chamber Speeds Gas-Fading Tests

NEW GAS CHAMBER for testing gas fading of fabrics has been developed by U. S. Testing Co., Hoboken, N. J. The chamber accelerates gas-fading tests, runs at a higher temperature, and is more compact than previous units.

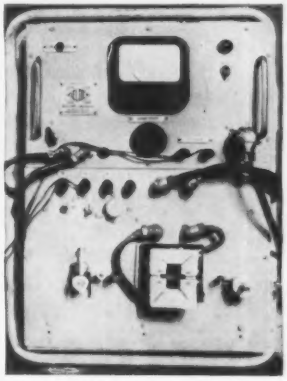
Pocket Microscope Magnifies Weaving Defects

THREE NEW MICROSCOPES, each of which will magnify a ¼-in. section of fabric to 50 diameters, are available from S. Christian of Copenhagen, Inc., 200 Stockton St., San Francisco 8, Calif. The lowest-priced model sells for $10 and has no graduated scale on the lens. A second model with an achromatic lens but with no scale sells for $14. A third model selling for $22 has both an achromatic lens and a scale on the optic graduated to 0.1 mm. Carrying cases for all three models are available. Length of the microscopes is 5¾ in.; maximum diameter is ¾ in.

Arealometer Measures Cotton-Fiber Maturity

THE AREALOMETER, an instrument used to determine fineness of cotton fibers, has been adapted to measure fiber maturity by Special Instruments Laboratory, Inc., 1003 Highland Ave., Knoxville, Tenn. The instrument gives a reading that can be used to classify bales by fiber maturity.

Electronic Device Measures Yarn and Sliver Uniformity



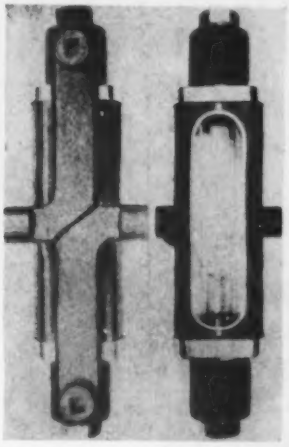
YARN COUNTS as high as 250s as well as sliver and roving can be tested for uniformity.

A new yarn and sliver uniformity testing machine perfected at Manchester College of Technology (England) is available from Fielden Instrument Corp., 2920 N. 4th St., Philadelphia 33, Pa. The instrument will handle sliver, roving, and yarn.

The instrument uses a modified Fielden dielectric comparator and indicates variations in weight per centimeter along the material being measured. A continuous record of the variations is shown on a cathode ray oscillograph or pen recorder.

The basic principle used is that of measuring the change in capacity caused by introducing material into the gap of a fixed air condenser.

Adapter Permits Meter In Horizontal Lines



AN ADAPTER is now available from Fischer & Porter Co., Hatboro, Pa., for installing meters in horizontal process piping. The adapter eliminates the necessity for a vertical rise in a line where head room is at a premium. Eye-level flow indication for accurate instrument reading is now made possible by this adapter, where necessity of vertical runs made it impossible before.

Level Switch Operates On New Principle

A level switch, the Tektor, that is said to make possible the level control of practically all liquids and solids has been announced by Fielden Instrument Corp., 2920 N. Fourth St., Philadelphia 33, Pa. Liquids may be either high or low in viscosity and may have electrical conducting or insulating properties.

The equipment does not rely on floats, diaphragms, or any moving mechanical parts. Nor is electrical contact necessary with the material under control.

The electrode, a simple probe that is inserted in the container at the desired level, is 4 to 6 in. long and ¾ to 1 in. in diameter.

A level differential of 1/32 to ½ in. may be obtained. The probe may be insulated or not. For some applications the sensing elements may be flush with the container's inner surface.

Moisture and Temperature Measured Directly

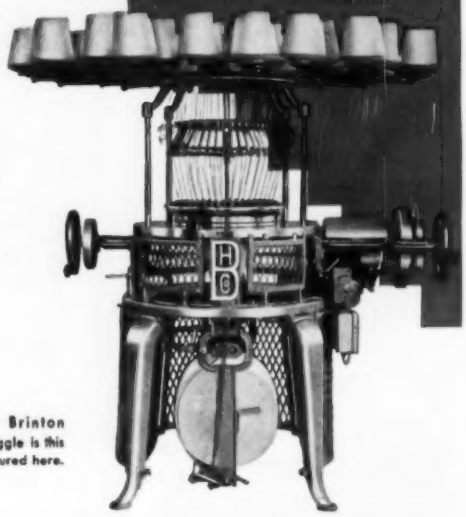
A new model Universal moisture tester developed by Burrows Equipment Co., Dept. 4B, 1316 Sherman Ave., Evanston, Ill., gives direct moisture percentage readings, without calculations or charts. The tester also indicates sample temperature. All types of material may be tested, and range of the instrument is 8½ to 40% moisture.

LEADING THE KNIT PARADE

William H. Noggle & Sons, Inc.
Established 1903
Manheim, Pa.

Mothers, the country over, ask for "IWANTA" when they shop for children's knitwear. They've learned to depend on this famous and unusually complete knit line for quality and smart styling.

William H. Noggle & Sons has found the unusually complete line of circular knitters made by Brinton assures the industry that whatever the knitting problem, Brinton not only can solve it—but will solve it better. That's been the Brinton reputation since 1888.



One of the many Brinton machines used by Noggle is this Model MERCEDES pictured here.

Engineered for the World's Greatest Knitwear Makers

BRINTON

CIRCULAR KNITTING MACHINES

KENSINGTON AVE. & M ST., PHILA. 24, PA., U.S.A.

Model MERCEDES Style RMP

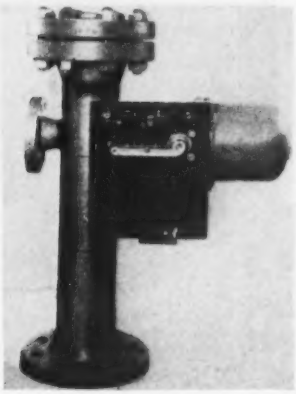
Plain Sinker Top Multiple Feed Jersey Machine

This high production revolving cylinder machine makes a wide variety of articles. It produces that fine balbriggan or plain jersey fabric for either underwear in bleached finish or basque, polo to T-shirts with colored yarns.

It has no special attachments—it's easy to understand and operate. It operates continuously, too, by simply using double cones on the stationary bobbin table.

Write for more detailed information on the MERCEDES, a machine of proved performance with average production of 75 to 80 yards per hour on every machine size.

Liquid-Level Detector Incorporates Precision Control



SMALL INCREMENTS in liquid level can be detected by this new instrument, which goes beyond rather than replaces the capabilities of existing devices.

A new displacement-type detector and transmitter with a bellows seal designed for more precise control of liquid levels has been developed by Minneapolis-Honeywell Regulator Co., Brown Instrument Div., 4494 Wayne Ave., Philadelphia, Pa. When used with a standard receiving-controlling instrument and a diaphragm valve, the detector is said to provide a smooth, friction-free system for accurate control and to detect the smallest changes in liquid levels.

The bellows construction and sensitivity of the new detector are designed to meet many liquid-level problems. A non-indicating displacement-type detector and transmitter is employed with any pneumatic receiver of the indicating, recording, or controlling form. When used with a wide-band proportional receiver-controller and a diaphragm motor valve, the result is said to be a smooth, friction-free, and accurate control of liquid level.

Dillon Universal Tester Improved

Several design improvements for the Dillon low-range tester have been announced by W. C. Dillon & Co., Inc., 141 So. Circle Ave., Forest Park, Ill.

Top range of the instrument is now 300 lb. instead of 100 lb. The motor drive has been improved proportionately. A solid (instead of flexible) shaft now connects the speed control to the motor transmission. The quadrant arm is now one continuous casting, and the speed-control dial is mounted on top of the tester base.

"Tagged Atoms" Used In Textile Testing

RADIOACTIVE TRACERS and instruments shown above are used by U. S. Testing Co., Hoboken, N. J., for measuring dye penetration and removal of dye-stuff in laundering, for measuring migration and/or coverage of fabric by various finishes, and for measuring cotton-fiber maturity as well as uniformity and durability of fabric coatings.

Side-Register Control Feeds Fabric Straight

THYRATRON CONTROL PANEL works in conjunction with a rotary-lens web scanner to maintain alignment of fabrics fed to slitters, etc.

A new electronic side-register control that automatically and accurately maintains the lateral position of a moving web of fabrics on slitting, rewinding, and other processing machines has been announced by Control Div., General Electric Co., Schenectady, N. Y.

Designed to increase production by stepping up machine speeds and to minimize waste, decrease costs, and provide a more uniform product, the new side-register control responds to a signal from a printed line on paper, plastic, or cloth of 1/32-in. minimum width. According to GE engineers, the control ignores all signals from printing adjacent to the guide line on the trailing edge of the scanning sweep. It also follows broken lines of the same width, and will not change the web position if the web breaks. Instantaneous responce is provided for errors as small as 0.001 in. or less.

Accurate pH Meter Fits the Pocket

ACCURACY to 0.1 pH is claimed for this 3-lb. pocket-sized pH meter. Carrying case is included.

A pocket-sized pH meter and companion probe unit designed to permit instant, on-the-spot pH testing has been developed by Analytical Measurements, Inc., 585 Main St., Chatham, N. J. The instrument is furnished completely self-contained with batteries in a Bakelite case 3x5 7/8x2¼ in. with an ever-ready case and with plastic tubes of buffer and KOl solutions. The meter is scaled from 2 to 12 pH for easy reading, and a simple adjustment gives readings from 0 to 14. Accuracy of 0.1 pH is claimed.

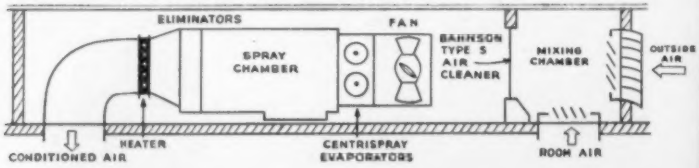
Roll-Surface Temperature Unit Operates Without Contact

A new roll-surface temperature unit developed by Leeds & Northrup Co., 4934 Stanton Ave., Philadelphia, Pa. measures temperature of a moving roll roll-surface without touching the roll. Because of this non-contact the unit cannot scratch, score, or in any way destroy delicate surface films, the manufacturers say. The device is applicable to roll diameters down to 9 in. and to flat surfaces.

The operation is independent of surface speed, emission characteristics, and finish. Mounting can be made at the center of the roll or at any other location wherever actual temperature measurement is desired. This new primary element works on the principle that a moving object carries with it a thin, closely adhering layer of air nearly the same temperature as the moving surface.

Mounted 1/32 in. from the surface is a measuring head, contoured to fit the roll. A continuous stream of air is drawn past the measuring element and this heats it to virtually the same temperature as

TEXTILE AIR CONDITIONING



Bahnson Centrispray Air Washer installed in monitor, conditions this Warping and Spooling Room.

Centrispray AIR WASHER

A new Bahnson development designed to improve textile operations.

In the Centrispray Air Washer, Bahnson Centrifugal Evaporators replace spray nozzles. The result is closer control with less water, less weight, and less maintenance. Compact Centrispray units are easy to install, require less space. Cooling by evaporation or refrigeration.

Humidity is controlled directly by the humidistat. Moisture is added in direct proportion to the room requirements.

The design allows high velocity through the unit—gives effective saturation with smaller cross section. Axial-flow fans are on the dry side of the system for longer life, easy maintenance.

Bahnson Company
ENGINEERS AND MANUFACTURERS
WINSTON-SALEM, N. C.

Better AIR CONDITIONING ... at lower cost

For natural or synthetic fibres—for any textile process—there is a Bahnson System suited to your needs. You benefit from Bahnson's wide range of equipment.

You can learn more about the Centrispray System or other Bahnson Systems. Write us and we will have our representative call to discuss your problem.

the roll surface. The slight difference between actual and indicated temperatures is nearly constant and can be considered negligible in most process controls.

New Electronic Micrometer Is Portable, Fast

THICKNESS MEASUREMENTS that can be made with speed and accuracy are said to be possible with this electronic micrometer now being manufactured by J. W. Dice Co., Englewood, N. J. Conducting or non-conducting textile materials can be gauged by the micrometer within accuracies of 0.00002 in., the company claims. All models are portable and do not require leveling.

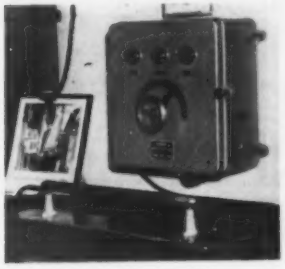
Color Densitometer Useful in Finishing

ACCURATE MEASUREMENT of color densities and visual densities is possible with this color densitometer.

A new color densitometer, an ultrasensitive precision photometer, has been developed by Macbeth Corp., P.O. Box 950, Newburgh, N. Y. This versatile instrument permits accurate measurement of color densities in narrow spectral ranges, as well as visual densities over an unusually wide range. With accessory equipment, reflection densities of opaque samples and transmission densities of liquids can all be measured.

The Macbeth-Ansco Color Densitometer can be used for measurement of color ranges in chemical reactions; measurement of liquid densities, both black and white and color; color determination of solid surfaces; and as a control instrument.

Fielden Introduces New Moisture Meter



THE MOISTEKTOR is housed in a splash-proof cast aluminum case. The only control is a large calibrated handwheel that can be locked in any position.

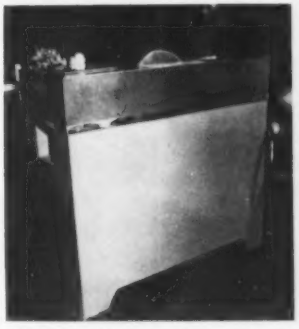
A simple, compact, electronic device that gives a continuous indication of the moisture level in fabrics has been introduced by Fielden Instrument Corp., 2920 N. 4th St., Philadelphia 33, Pa. The instrument is similar in performance to the Fielden Drimeter but has been introduced to deal with short runs of fabric of widely different weights. The new instrument, the "Moistektor," is said to require a minimum of attention and to give a rapid and accurate indication of under- or over-conditioning.

The device indicates the condition of the material by means of three colored bulbs. The orange center lamp is illuminated when the material is at its normal moisture content. Any departure from this level causes the green or red lamps to be illuminated, showing, in the case of the green lamp, that the material is too dry, or with the red lamp, that it is too wet. Additional contacts actuated by the lamp relays and the instrument can be used to sound an alarm, or, if required, to operate a control mechanism.

Individual Recorder for Operating and Down-Time

A device that records operating and down-time of individual machines and gives the cause of the down-time is now available through Ericsson Telephone Sales Corp., 100 Park Ave., New York 17, N. Y. The Ericsson Centralograph (TW, March '51 p. 134) has an electrical contact attached to a main shaft on each machine. While the machine is operating, electrical impulses are transmitted to a central recorder. If the machine stops, the line on the chart indicating operation stops but the chart continues to move. A dial on each machine permits the recording of the cause for the stoppage on the central recorder.

Fiber Blender for Sampling



A FIBER BLENDER for making a thoroughly blended composite sample of many individual fiber samples taken from bales has been developed by U. S. Testing Co., Hoboken, N. J. One or two passes through the machine can be made very quickly.

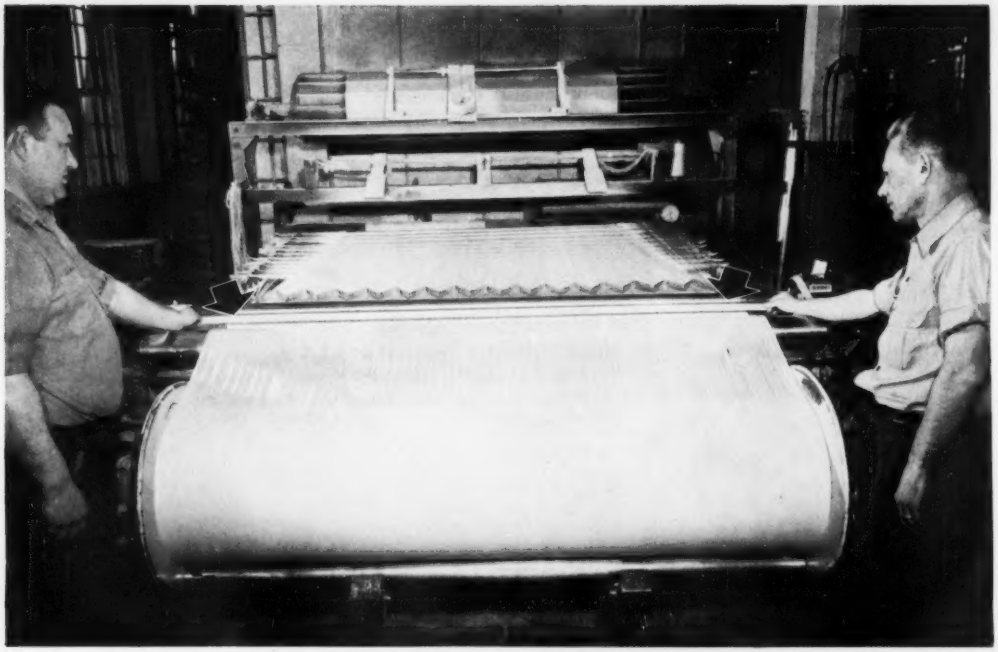
Light Beams Guide Fabric Feeding to Machines

TWO LIGHT BEAMS are used in this electronic device for edge guidance of materials into tenters or printing machines.

Automatic edge guidance for fast- or slow-moving fabrics feeding into tenters or printing machines is provided by a compact, dual-beam, transmitted-light electronic system developed by Airlectron, Inc., 110 Washington St., New York 6, N. Y.

Intresting features are a new swivel correction-range adjustment that eliminates all mechanical parts; aircraft-type vibration-proof mounts; unit-contained amplifiers that permit operation of the sensing head at any distance from the

(Continued on page 242)



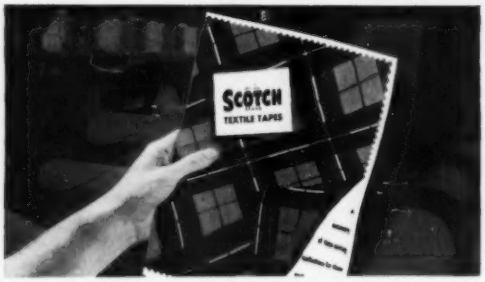
TAPE TAKES OVER

. . . and replaces clamp-bars for speedy and efficient beam transfer

Tape's the easy way to hold warp ends in alignment during transfer of loaded beams! A large, well-known New England woolen mill does the job faster with "Scotch" Textile Tape No. 254. Entire tying-in operation is simplified—with fewer crossed warp ends—by sandwiching threads between two strips of this handy, stick-at-a-touch tape.

Other "Scotch" Textile Tapes are cutting costs on dozens of *other* textile operations at many of the nation's largest mills. And these tapes can "take over" for you! For more information, write for booklet below.

TABBING END LAPS is a quick, safe operation with "Scotch" Textile Tape No. 916—plenty of adhesive strength, yet no adhesive residue to spoil cloth. High stretch factor of tape allows for contraction of material. No pin damage, no wasted yardage, either!



FREE BOOK! Twenty-six pages packed with facts and photographs show you how and where many mills have streamlined production with "Scotch" Textile Tapes. For your copy, write: Minnesota Mining & Manufacturing Co., Dept. TW-101, St. Paul 6, Minn.

The term "Scotch" and the plaid design are registered trademarks for the more than 100 pressure-sensitive adhesive tapes made in U.S.A. by Minnesota Mining & Mfg. Co., St. Paul 6, Minn.—also makers of "Scotch" Sound Recording Tape, "Underseal" Rubberized Coating, "Scotchlite" Reflective Sheeting, "Safety-Walk" Non-slip Surfacing, "3M" Abrasives, "3M" Adhesives. General Export: Minn. Mining & Mfg. Co., International Division, 270 Park Avenue, New York 17, N. Y. In Canada: Minnesota Mining & Mfg. of Canada, Ltd., London, Canada.

☆ For AIR CONDITIONING, HEATING, AND VENTILATING

Precision Lab Conditioner Mass-Produced for Low Cost

TEMPERATURE AND HUMIDITY are held at standard conditions by this unit, designed for controlling air in laboratories.

A new laboratory air conditioner designed to maintain standards of temperature and humidity has been developed by Carrier Corp., Syracuse, N. Y. The company emphasizes that the unit is designed for production-line manufacture.

Features of the conditioner, occupying only 6 sq. ft. of floor space, are:

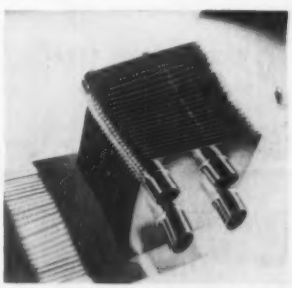
1. Rugged, all-steel construction.
2. Separate discharge plenum with adjustable air deflectors for both horizontal and vertical distribution of the conditioned air leaving the unit.
3. An electric reheater that maintains temperature.
4. A single centrifugal-type fan designed for variable-capacity requirements and driven through a V-belt drive by a resiliently mounted motor.
5. Interior of the cabinet insulated to protect cooling efficiency and to absorb mechanical noise.
6. Large, low-resistance air filters of the standard replaceable type.
7. Large-area Aerofin-type cooling coils that provide maximum cooling and dehumidifying efficiency plus low resistance to air flow.
8. Thermostat and hygrostat that can be mounted in a suitable location on laboratory wall and connected to the unit with low-voltage wiring.
9. Modern, direct-connected Carrier refrigerating machine that operates quietly and dependably.
10. Sturdy spring-mounted motor-compressor base.

Heat Exchanger Has Corrosion-Resistant Construction

An improved heat-exchanger unit that requires no welding or soldering in the assembly has been developed for textile-industry application by The Carpenter Steel Co., Alloy Tube Div., Union, N. J.

The corrosion-resistant assembly has a mechanical joint and requires no bonding agent; thus maximum strength at the joint is assured.

In making the exchanger, ⅜x0.049-in.-wall stainless tubing is mechanically bonded to flat plate-type fins of stainless steel. The fins are stamped and belled, and a bonding collar is formed at each opening.



MECHANICALLY FORMED JOINTS between stainless-steel tubes and fins in this heat exchanger are said to assure maximum strength and to eliminate welding.

Humidifier Designed For Small Requirements

TABLE-MODEL HUMIDIFIER puts out 2½ lb. of water per hr. It measures 9 x 5 in.

A new "table model," heavy-duty, all-purpose humidifier has been developed by Daffin Mfg. Co., Lancaster, Pa. Positive output of the new unit, which measures 9 in. across and 5 in. high, is 2¾ lb. of water per hr. The unit contains an automatic float valve and may be adapted for automatic control with a humidistat.

Plug-In Humidity Control

A PLUG-IN HUMIDITY CONTROLLER for operating electrically powered humidifers and dehumidifiers has been developed by Abbeon Supply Co., 58-10 41st Drive, Woodside, N. Y. The necessary electrical work for installing controls has been done at the factory, and only three steps are necessary at the installation.

XYNOFIX FL

A READILY AVAILABLE FIXING AGENT

For practically all types of Dyestuff Applications

. . . also imparts excellent perspiration resistance

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Humidifier Nozzle Produces Fine and Uniform Droplets

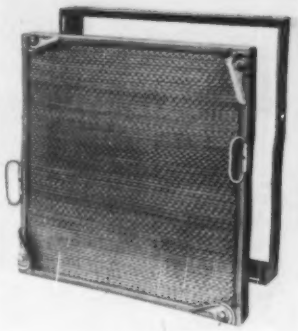
EXTREMELY FINE and uniform fog droplets at low operating pressures are claimed for a new line of low-gallonage nozzles by the manufacturer, the Bete Fog Nozzle, Inc., Greenfield, Mass.

Employing the pin-jet-impingement principle, the new nozzles have no internal parts and cannot clog with foreign particles smaller than the orifice size, according to the manufacturer. A new pin design reduces interference of the pin with the fog pattern.

The new Bete nozzles are made in 10 orifice sizes, from 0.015 to 0.080 in. diameter, with flow rates from 1 to 100 gal. per hr.

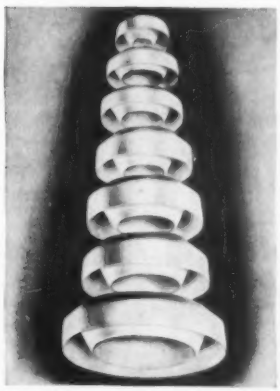
Filter Cleans Air At Velocities Up to 500 Fpm.

A new high-velocity unit air filter, the American type HV, has been introduced by American Air Filter Co., Inc., Louisville, Ky. The filters are made of corrugated strips of fine mesh wire. They can be serviced in the conventional way with washing and charging tanks, or they can be reconditioned by washing out the accumulated dust with a hose and spraying with filter adhesive.



CORRUGATED STRIPS of fine mesh wire that form pyramid-shaped pockets in this new filter can be cleaned in washing tanks or washed out with a hose.

Valve Packings Are Chemically Inert



CHEMLON "V-RING" packings of pure Teflon for hydraulic valves have been developed by Crane Packing Co., 1800 Cuyler Ave., Chicago 13, Ill. The packings are said to be frictionless, to cause no wear on valves, and to last longer than conventional packing. Chemically inert and not affected by corrosive solutions, the packings stand temperatures up to 450° F. Numerous standard and special sizes are available.

Electronic Air Cleaner Comes in Packaged Form

An encased Precipitron electronic air cleaner has been developed by Westinghouse Electric Corp., 306 Fourth Ave., Pittsburgh, Pa. The air cleaner resembles a factory-fabricated section of air duct or plenum chamber, 96 in. long with a built-in Precipitron. The complete type-PE package is designed to assure minimum installation time and expense with maximum air-cleaning efficiency.

The PE units are available in air-cleaning capacities ranging from 8,330 cfm. at 90% efficiency to 44,000 cfm. at 85% efficiency. The over-all cross-sectional dimensions of the PE units range from 5 ft. 4 11/16 in. high by 5 ft. 2¼ in. wide for the 8,330-cfm unit, to 10 ft. 4 11/16 in. high by 11 ft. 1¾ in. wide for the 44,000-cfm. unit. All units are 8 ft. long with approximate net weights in pounds of from 1,970 for the smallest to 4,800 for the largest units.

The power pack is the electronic center that provides the high dc. energizing voltages for the ionizer and dust collector cell. Operation is on 115-v, single phase, 50- or 60-cycle power supply and consumes a maximum of 350 w. when fully loaded. Access-door interlock switches de-energize ionizer and dust collector cells when door is open.

New Humidifier Has Higher Capacity

A new model heavy-duty, high-capacity humidifier, Hum-O-Zone model 300, has been developed by Daffin Mfg. Co., Lancaster, Pa. The new humidifier uses a high-pressure pump that breaks up water through specially developed nozzles.

The humidifier is fully adjustable; moisture output may be adjusted to fit individual industrial requirements. The unit is powered by a ½-hp. electric motor.

Humidifier Is Self-Contained

STANDARDS PARTS are used in manufacture of this humidifier, a factor that is said to contribute to lower cost.

A new industrial humidifier, the IMPSCO, is now being made by the Industrial Materials Purchaser Co., 401 Broadway, New York, N. Y.

The new humidifier requires no ducts, no pumps, no compressed air, and no steam lines. Each unit is a complete system in itself and only requires a water feed line. No return water line is necessary. The vapor is emitted in an extremely fine mist-like form.

The humidifier works on the principle of atomization through centrifugal force. The manufacturer claims that this system produces the finest vapor at the lowest cost for equipment, installation, operation, and maintenance. Another big saving claimed is that all parts are of standard manufacture and do not require special factory repair and replacement.

Sprayed Asbestos Helps Dripping Wall Problem

Condensation of moisture on walls and ceilings is said to be no problem when the surfaces have been sprayed with a specially treated asbestos fiber. The new product, developed by Turner Asbestos Cement Co. Ltd., England, is distributed in the U. S. by Keasbey & Mattison Co., Ambler, Pa.

The asbestos spray can absorb several times its own weight of moisture. A ½-in. coating is said to prevent water dripping in humidified rooms.

Cost of application (in England) is from $2.40 to $3.00 per sq. yd.

DENMAN'S NEW IMPROVED PICKER

Challenges THE FIELD!

NEW VALUE... UNMATCHED BY ANY PICKER!

Compare the new, improved Denman Loop Picker with any other picker on the market today *regardless of cost.*

- **Streamlined design—smooth surfaces and rounded edges.**
- **Greater uniformity, achieved by Denman's new molding process.**
- **Correct *hardness*—built to the tested degree of hardness which gives best running qualities.**
- **Superior toughness—for hard service, long life.**
- **Made to the specifications of outstanding weavers.**

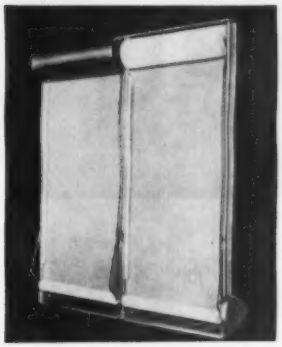
LOWEST COST PER LOOM PER YEAR

Exclusive Sales Agents — *Manufactured By Denman Tire and Rubber Co.*

The **TERRELL MACHINE CO.,** *Inc.*

CHARLOTTE, N. C.

Recirculating Filter Changes Medium Automatically



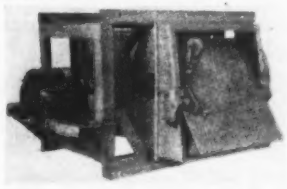
FILTERS CHANGE AUTOMATICALLY when accumulated lint increases air pressure to a predetermined point. Lint and dust gathered are rolled up in filter at bottom and can be disposed of conveniently.

The Auto-Airmat, an automatic dry-type air filter designed to clean the air recirculated from weaving and spinning rooms, has been developed by American Air Filter Co., 125 Central Ave., Louisville 8, Ky.

The Auto-Airmat is built in vertical sections 3 ft. 8 in. wide and in heights from 5 to 13 ft. in 4 in. increments. A single ply of filter material from a roll at the top of the casing travels down the face of the filter on a rotating screen and is automatically rerolled at the bottom of the casing.

When lint and dust deposited on the exposed Airmat filter cause the resistance to air flow to rise to a predetermined point, the pressure switch closes the circuit to the drive motor. The drive motor, operating through a gear reducer and chain drive, rotates the screen until a sufficient amount of clean Airmat filter is introduced to the air flow to reduce the resistance.

Improved Draft Inducer



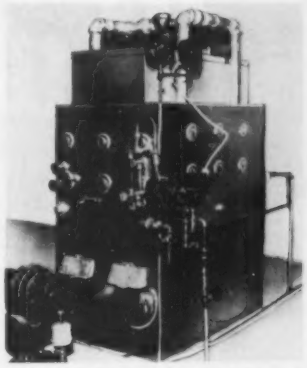
A DRAFT INDUCER with integral barometric dampers for control of furnace draft has been developed by L. J. Wing Mfg. Co., Linden, N. J. The units have variable-speed motors and can be equipped with built-in barometric dampers to achieve highest combustion efficiency.

New Boiler Improves Drying in Bleachery

A new boiler specifically designed for use in the textile industry has been developed by Consolidated Boiler Corp., 126 Dartmouth St., Boston, Mass. The boiler is constructed to operate on present or old-type process equipment. One boiler is said to furnish three types of steam: a saturated steam with temperatures as high as 220 to 290° F. furnished in 15 min.; some saturation in the steam, with temperatures as high as 280 to 400° F. in 20 min.; and a dry steam with no trace of moisture with temperatures as high as 390 to 550° F. in 35 min.

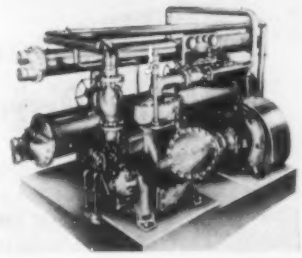
All three types of steam can be furnished at the same time or separately. An above-average recovery at all times is claimed by the manufacturer.

Recent bleachery tests of the generator made on drying heavy goods show an over-all gain in speed of 21.6% and gain in water evaporation of 21% over previous runs.



THREE TYPES OF STEAM, differing in moisture saturation, can be delivered separately or all at once by this boiler.

Refrigeration Unit Designed For 100- to 150-Hp. Range



COMPACTNESS and high operating efficiency are features claimed for this new refrigeration unit.

Two models of reciprocating refrigeration machines specifically designed for air-conditioning and refrigeration use in the 100- to 150-hp. range have been announced by Carrier Corp., Syracuse, N. Y. After having been thoroughly field tested, the machines are now being produced in quantity.

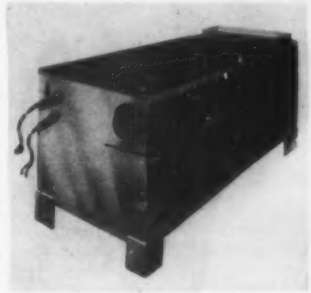
The reciprocating machine, designated as the Carrier 30B, is furnished as a complete package with compressor, cooler, and condenser, with all interconnecting piping, fittings, safety and capacity controls, gauge board, and cooler and condenser stands included. Pre-engineering is said to assure precise matching of components for maximum operating efficiency and economy. Compactness of assembly, provided through special design of pipes and fittings, is said to reduce pressure loss to a minimum, guarantee better over-all performance, and permit a wide range of applications where space is critical.

20-Kw. Generator Used For Dielectric Heating

A new 20-kw. radio-frequency generator for dielectrically heating textile materials is available from Westinghouse Electric Corp., 306 Fourth Ave., Pittsburgh 30, Pa.

The generator is readily adaptable to batch or continuous-production methods. It delivers rated power at a 100% duty cycle, in accordance with NEMA standards. Built-in load coupling and tuning elements permit maximum transfer of power into a wide range of loads by front panel control.

You Can Dry Damp Areas With This Unit



PREVENTION OF MOISTURE DAMAGE in warehouses and other areas is the job of this dry conditioner made by Dryomatic Corp., 812 N. Fairfax St., Alexandria, Va. Model 100, which is shown in the above photograph, costs $594 and dehumidifies a 25,000-cu. ft. enclosed area. Other sizes of the unit are available.

Guaranteed

THE QUALITY OF BOGER & CRAWFORD KNITTING YARN IS GUARANTEED — THE HIGHEST TRIBUTE WE CAN PAY IT.

Signed Frederick Boger

Quality Yarns

. . . A Guarantee That Has Held For 44 Years and

. . . Is Doubly Important In The Present Emergency

Let Boger and Crawford cotton yarns help you produce a product of merit! You are called upon in the National Emergency to do the best possible production, and here Boger and Crawford mercerized yarns can help you.

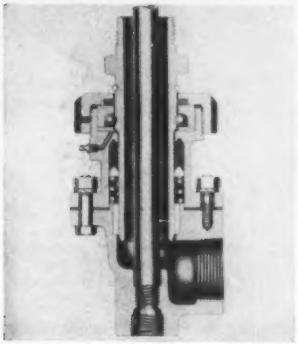
With every order you are protected by our guarantee of quality. Industry over the years has constantly used Boger & Crawford's product, and because of the constant accuracy of performance, we are looked upon with confidence.

Specify Boger & Crawford Vitamin "Q"—"Q" for Quality—cotton, mercerized, Spun Nylon.

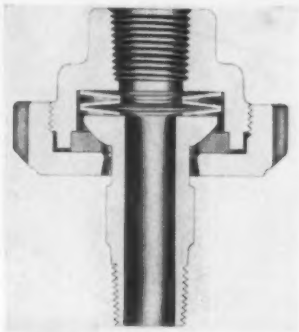
Boger & Crawford

BOGER CITY, N.C. • PHILADELPHIA, PA. • BOSTON, MASS. • CLEVELAND, OHIO

Revolving Joint Improved; Swivel Joint Introduced



IMPROVED REVOLVING JOINT was developed to operate at high speed, low-turning torque.



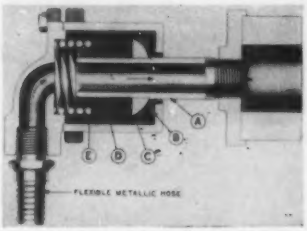
NEW SWIVEL JOINT operates successfully on steam or water at pressures up to 300 lb., and speeds to 30 rpm.

An improved revolving joint and a new rotary swivel joint have been developed by Barco Mfg. Co., 1801 Winnemac Ave., Chicago, Ill.

The Barco revolving joint, Type 1B, handles 150-lb. steam pressure whereas the standard Barco revolving joint will carry 250-lb. steam pressure. The new joint has been developed for high speed and continuous rotation with extremely low turning torque.

The new Barco rotary swivel joint supplements the line of standard swivel joints in use for many years. It features low turning torque and perfect sealing under all conditions, including hot and cold water or steam and cold water. The joint has operated successfully on continuous rotation up to and beyond 30 rpm. It is suitable for working steam pressures up to 300 lb.

Rotary Joints Available For Higher Pressures



CALENDERS and other machines where lateral roll movement may affect pressure joints can use this heavier-duty joint.

Self-supporting rotary-pressure joints are now available in heavy-duty construction suitable for operating pressures up to 250 lb., according to the Johnson Corp., Three Rivers, Mich. This type joint is used where heating or cooling agents must be admitted to rotating rolls.

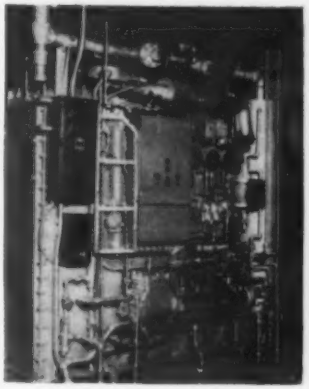
The new series retains the packless, self-lubricating, and self-adjusting features of the company's standard line.

Steam Plant Designed For Compactness, Efficiency

A compact, reliable steam plant has been developed by Combustion Engineering-Superheater, Inc., 200 Madison Ave., New York 16, N. Y. The C-E recirculation steam generator is a complete steam plant and includes feedwater pump and control, fuel equipment and safety devices, forced-draft fan, safety valves, circulating pump, and other auxiliaries.

The generator may be fired by light or heavy fuel oil or by natural gas. Models are available in several sizes for steam capacities from 2,800 up to 6,000 lb. per hr. and for operating pressures up to 300 psi. A notable feature of the generator is its compactness. The 6,000-lb. capacity unit for burning light oil or gas occupies a space 6 ft. 11 in. long x 5 ft. 5 in. wide x 6 ft. 11 in. high.

Compared to small conventional water-tube boilers of modern design or current package-type fire-tube units, the generator is said to produce three to four times as much steam per cubic foot of space occupied. The steam generator uses the controlled recirculation principle. The high rate of heat transfer permits maximum steam production per unit of heating surface.



MAXIMUM OUTPUT in a minimum of space is the principal feature of this generator, shown here as installed in a textile mill.

Exchanger Has Low-Cost Design Corrosion-Resistant Heat

THIS HEAT EXCHANGER can be mounted directly in installed piping systems.

A new heat exchanger developed by Martin-Quaid Co., 1886 Sedgely Ave., Philadelphia 32, Pa., is designed to provide corrosion resistance at a fraction of the cost of conventional alloy-metal units.

In the Econalloy design, corrosion-resistant materials are used only where required, as flange inserts and for the inner tube which contacts the fluid or vapor being heated. A corrosion-resistant joint is made without welding to the inner tube.

The Econalloy heat exchanger is also designed to provide uniform heat over the full surface from flange to flange without dead spots.

The Econalloy line is furnished in sizes from a fraction of a square foot of heating surface to several hundred square feet, in lengths up to 30 ft. per segment. Integral tube sizes range from ¾ to 4 in. Standard units are available for pressures up to 900 psi. and temperatures in excess of 700° F.

(Continued on page 246)

*Overcured Sections — unavoidable every 30' to 40' in all belts made by the flat press method. Only Rotocuring (continuous, non-stop curing) eliminates this major cause of belt failure.

OCS* means Trouble Ahead!

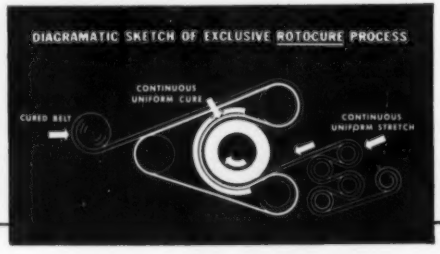
This Achilles Heel of Conventional Conveyor Belts now completely eliminated by ROTOCURE

Your neighborhood tailor with a hot pressing iron can give you a simple but dramatic example of what *too much* heat and pressure applied to a given area of cloth (or rubber compound) can do to these structures. In the manufacture of conveyor belting by conventional flat press curing the result is overcured segments 2" to 4" long across the belt width. These weakened portions of the belt are inherent in this process of "start and stop" vulcanization. They get a double treatment because earlier cured areas move forward *less than a full press length.*

Rotocure, the modern BWH method, eliminates these Achilles Heels of otherwise strong belting. Your Rotocure belt is *constantly* in uniform motion during vulcanization.

How does it pay off? In (1) elimination of mechanical distortion at the press ends, (2) up to 40% increased belt flex life, (3) constant, uniform stretch, (4) uniform, abrasion-resistant covers. Remember the major CURE for high belt maintenance costs and premature belt failure is NO OVERCURING! You'll cut the costs of whatever you convey. See your BWH distributor or write us direct.

P.S. Look into BWH rotocured transmission belts also. They permit operation at lower tensions. You get an *additional* bonus in extended belt life.



BWH DEPENDABLE RUGGEDNESS

Another Quality Product of

BOSTON WOVEN HOSE & RUBBER COMPANY

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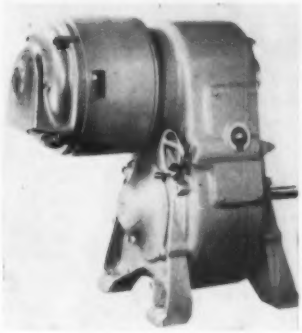
☆ For POWER TRANSMISSION

Larger-Horsepower Variable-Speed Drives Available



DRIP-PROOF MODEL Speed-Trol is one of a new line of larger drives.

Larger-horsepower Speed-Trol electric power drives have been announced by Sterling Electric Motors, Inc., 5401 Anaheim-Telegraph Rd., Los Angeles 22, Calif. The drives are designed to meet a growing demand for variable speed drives of 20- and 25-hp. ratings.

Outstanding features of the drives are said to be positive adjustment of pulleys, infinite speed variation, and accurate control of speed under varying loads.

Drives of these new ratings will be available in splash-proof, drip-proof, and totally enclosed, fan-cooled models.

Packaged Steam Power Plant Is Now Available

The Ticosteam Generator—a packaged steam power plant—has been announced by Titusville Iron Works Co., Titusville, Pa. The unit is fully automatic and is mounted on a steel skid for installation on level and solid floors without foundation construction.

Available in a full range of sizes and several fuel combinations, the steam generator has an automatic fuel-mixing device for maximum flame efficiency and smokeless operation.

Motor Starter

Protection of operators as well as the connected machines is stressed in a motor starter—the motor Watchman, Class 10-100 S1—available from Westinghouse Electric Corp., 306 Fourth Ave., Pittsburgh 30, Pa.

With ratings up to 600-v., 7½-hp. polyphase, 5-hp. single phase, or 220-v., 1½-hp. d.c., the unit starts, stops, and provides overload protection.

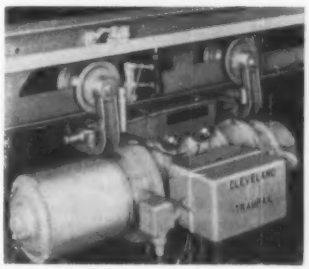
Teeth on Driving Belts Prevent Pulley Slippage

A new rubber and fabric belt with teeth, known as the Gilmer timing belt, is now being made by the U. S. Rubber Co., 1230 Avenue of the Americas, New York 20. It is designed to prevent belt slippage and permit split-second timing. The belt is said to attain speeds up to 16,000 ft. per min. and to operate more quietly than gears running in an oil bath.

The belt is similar in appearance to a flat belt except that it has regularly spaced rubber teeth along its inner surface that engage in corresponding grooves in the driving and driven pulleys. The belt can also be used as a functional part, as well as for transmitting power. It is claimed that on commercial sewing machines, the belt has made possible operating speeds that are 50% faster than those possible with other drives.

In addition to its anti-slip characteristic and precision driving, it is claimed that the belt will not stretch. Since it has no initial tension, the belt has high efficiency with low bearing pressure and will operate on fixed centers without take-up adjustments. The belt's flexibility permits pulley diameters as small as ¼ in. at 10,000 rpm. with a heavy driven load.

Overhead Electrification System Stresses Safety

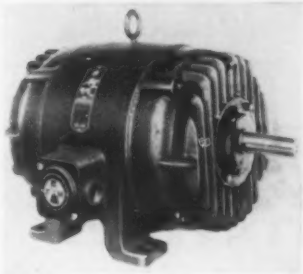


SLIDING CURRENT-COLLECTOR SHOES contact three sides of the plastic-enclosed conductor bar in this new overhead tramrail power system.

A new type of electrification for overhead cranes and tramrail systems has been announced by Cleveland Crane & Engineering Co., Wickliffe, Ohio. The improvement — Saf-Powr-Bar — consists of inverted U-shaped conductor bars with sliding current-collector shoes. The arrangement may be used on either new or old tramrail systems.

Plastic enclosing of Saf-Powr-Bar prevents accidental contact with an electrified conductor bar.

Motor Line Expanded



THE LINE OF TYPE QZE, totally enclosed, non-ventilated, squirrel-cage, induction motors of Fairbanks, Morse & Co., Chicago 5, Ill., has been extended to include continuous-duty ratings built in NEMA standard frame 284. At present, 7½-hp., 1,800-rpm., and 5-hp., 1,200-rpm. motors are in production.

Cotton-Card Drive Uses Standard Motor and Controls

A new, individual cotton-card drive, designed so that heavy starting loads do not require the use of special high-torque motors or special starting controls, has been announced by The American Pulley Co., 4200 Wissahickon Ave., Philadelphia 29, Pa.

The drive uses a standard V-belt with an adjustable-speed sheave on the motor and the centrifugal-clutch sheave on the 5-to-1 ratio reduction unit.

The entire drive is mounted in the card arch and is completely supported by the card-shaft pillow block. This card drive is entirely enclosed in a heavy guard and extends only 3½ in. beyond the card shaft.

Variable-Speed Drives Feature Compactness

A new variable-speed transmission series that incorporates the Worthington tandem-belt design has been announced by Worthington Pump & Machinery Corp., Harrison, N. J. The new line consists of models with the following hp. rating: 1, 3, 5, 7½, 10 and 15. Variations available are 16 to 1, 10 to 1, 9 to 1, 8 to 1, and 6 to 1.

The tandem-belt design particularly suits the drives to uses in which compactness is essential. Units can be furnished for vertical or horizontal operation, to run in either direction. Electrical remote controls are available.

The drive is also available as a packaged unit, with built-in NEMA standard motors, or with modifications to suit specific requirements.

Where Quality Counts

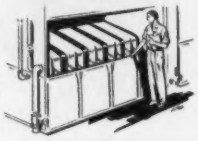
Specify

GENERAL'S

ANHYDROUS

GLAUBER'S SALT (Sodium Sulfate)

IN TEXTILE DYEING
As a Leveling Agent in the Bath



IN MANUFACTURING DYES
For Standardizing Dyes

MANUFACTURING SYNTHETIC DETERGENTS

HIGH PURITY—Due to rigid manufacturing quality controls, General's Anhydrous Glauber's Salt consistently assays 99.9% Na_2SO_4.

GOOD SOLUBILITY—Goes into solution readily and is practically free from undesirable impurities.

EFFICIENT—Produces sparkling clear solutions; helps prevent contamination of dyes or colors.

ECONOMICAL—Highly concentrated form offers economies in shipping costs.

READILY AVAILABLE—Stocked throughout General Chemical's chain of distributing stations from coast to coast.

BASIC CHEMICALS

FOR AMERICAN INDUSTRY

GENERAL CHEMICAL DIVISION

ALLIED CHEMICAL & DYE CORPORATION

40 Rector Street, New York 6, N. Y.

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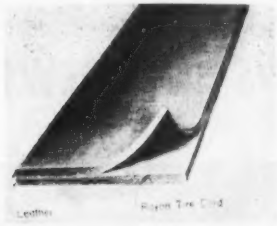
In Wisconsin: General Chemical Company, Inc., Milwaukee, Wis.

In Canada: The Nichols Chemical Company, Limited • Montreal • Toronto • Vancouver

For more information, write direct or use Reader Service post card.

Belting Has Rayon-Cord Insert



STRETCHING IS MINIMIZED in this new leather belting by means of a rayon tire-cord insert that does not prevent splicing as is done with a normal leather belt.

A new type of flat leather belting that has a rayon tire-cord insert to assure stretch resistance is being offered by Chas. A. Schieren Co., New York, N. Y. Some users of the new belting have reported 6 mo. to 1 yr. of operation without any take-up.

The rayon-core belt can be scarfed and made endless as with any other flat leather belt. Regular fasteners or lacing can also be used. Salvageability is unchanged.

Particular applications of the new product are: strippers and eccentric card belts, Rockwood or pivoted-base drives, mule-spinning frames.

Unit Substation Permits Savings in Cable

A new "midget" load-center unit substation, specially designed for low-voltage-regulated a.c. lighting and power service in factories and laboratories, has been announced by Unit Equipment Div., General Electric Co., Schenectady 5, N. Y.

Called an Inductrol Power Pack, the unit incorporates in one steel housing an air circuit breaker, a dry-type transformer, and an air-cooled induction regulator.

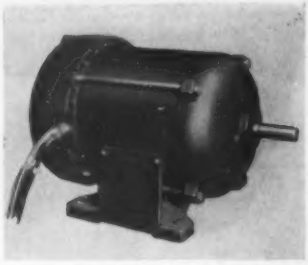
The new pack has a capacity ranging from 15- to 100-kva., with incoming circuit rates of 480 or 600 v., 60 cycles.

Brake Release Aids Sewing Operations

A new brake release for attachment to Amco Motor drives has been announced by The American Safety Table Co., Inc., Reading, Pa.

When treadle pressure is removed, the brake release moves up against the motor housing and automatically positions the clutch so that it does not touch either the driving member or the brake. The new Amco brake release is adaptable to all latest-type Amco motor drives. The price is $2.50 per unit.

Enclosed Motors Developed For Severe Conditions



CAPACITOR MOTORS are now available in the totally enclosed, fan-cooled construction shown above.

Extension of the Tri-Clad line of single-phase capacitor motors has been made by General Electric Co., Schenectady 5, N. Y. The line now includes a totally enclosed, fan-cooled construction.

Features of the new design include starting capacitors and a switch mounted within the frame to provide maximum protection with minimum space requirements.

The motors are available in horsepower ratings of 1, 1½, 2, 3, and 5.

☆ GENERAL INDUSTRIAL SUPPLIES

Loom-Motor Starter Is Gasketed Against Lint

A new motor starter with a NEMA 1A gasketed enclosure is available from Westinghouse Electric Corp., 306 Fourth Ave., Pittsburgh 30, Pa. The starter is designed for starting and stopping polyphase induction motors and also provides overload protection. The semi-dust-tight enclosure is intended primarily for application in the textile industry where lint is a major problem.

The rotary-action, slam-proof handle mechanism operates an over-center toggle mechanism that gives quick-make and quick-break contact action. A bimetallic disk-type thermal overload relay gives precisely calibrated motor protection.

The starter is rated up to 600 v., 7½-hp., polyphase. De-ion arc-quenching chutes extinguish arcs within one-half cycle. Line terminals can be provided either at the top or bottom of the enclosure, as required.

The self-indicating, close-fitting handle can be locked in either the "ON" or "OFF" position, and the cover can be locked shut. The cover latch holds the cover tightly shut against the neoprene gasket; the cover cannot be opened unless the starter is "OFF."

Non-Melting Grease Is for Hot Spots

A new lubricating grease, "Kantmelt," for use on either plain or anti-friction bearings has been announced by Specialty Products Co., 190 Warren St., Jersey City 2, N. J. The grease is said not to melt, even under highest temperature conditions. The product contains no metallic soaps, no fatty acids, no filler, no water, and no alkali. It is said to be completely stable under all conditions of service and storage.

Plastic Coating Protects And Smooths Wood Products

Fenolic 101, a plastic coating for wood or solid-composition surfaces, has been announced by Plastic Cement & Chemical Co., 340 E. 27th St., New York 16, N. Y.

The thermosetting resin is recommended for new, uncoated wood or wood that has had the old finish completely removed. The product can also be used on unpainted composition surfaces such as masonite.

Application can be made by brush, spray, dip, or roller.

Polyethylene Lining Is Chemically Inert

A removable, chemically resistant, lightweight, polyethylene lining that can convert tanks, drums, and crocks into efficient, chemically inert containers has been developed by Enley Products Inc., 254 Pearl St., New York 7. The new linings have high tensile strength and will remain flexible at temperatures as low as 40° F. below freezing, and as high as 180° F. Chemically, they possess high resistance to mineral acids, alkalis, alcohols, radioactive materials, oxygenated solvents, hydrofluoric acids, etc. The liners are available in 4-, 10-, and 15-mil thicknesses and sizes for various uses and to fit various containers.

One Grease For the Whole Mill

A new oxidation-inhibited multipurpose grease, Cosmolube, said to meet practically all of the grease needs in an average mill, is being offered by E. F. Houghton & Co., Philadelphia, Pa. The grease, resistant to high heat, cold, or wet conditions, is available in two consistencies.

Booth

Originators of **STRIP-O-MATIC** *

CARD CLOTHING NEWS AND VIEWS

WHAT *STRIP-O-MATIC* USERS SAY:

"Considerably Less Shrinkage with STRIP-O-MATIC"

I have reported to you often on the performance of *STRIP-O-MATIC*, now I'd like to have you read just what Mr. Paul Benninghofen of Shuler & Benninghofen, manufacturers of Papermakers Felt Jackets in Hamilton, Ohio, recently wrote to a friend in another mill:

Dear ——: "Acknowledging your letter of Dec. 13th, the first breaker on one of our card sets is equipped with *STRIP-O-MATIC* card clothing. It has been in service about 3 months.

"We are sold on this type of card clothing. We find the shrinkage is much less, the production is much higher, the yarn is much better quality.

"When we equipped this particular first breaker with this card clothing, we needed only a new cylinder. However, in order to give it a fair trial, we also re-equipped workers and strippers. The doffer, however, was not changed.

"We find the use of this card clothing enables us to strip the cards much easier. We use a vacuum stripper and it works to much better advantage on card clothing of this type.

"As our card clothing needs replacing, we intend to use *STRIP-O-MATIC*.

"Yours very truly,
SHULER & BENNINGHOFEN
Paul Benninghofen."

This letter is typical of the comments of the many pleased users of *STRIP-O-MATIC*. We sincerely believe that you, too, will find *STRIP-O-MATIC* gives you better carding at much lower cost. The drawings comparing *STRIP-O-MATIC* and conventional card clothing show why *STRIP-O-MATIC* runs virtually without stripping—saves time—saves labor—saves money. A booklet describing *STRIP-O-MATIC* and presenting the case history of an interesting and successful user is yours for the asking. Write today to Benjamin Booth Company, Dept. TW. This folder may well start you on the way to substantial savings in the operation of your cards.

Sincerely yours,

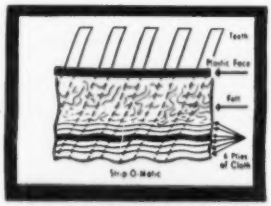
E. Allen Shaper Jr.

PRESIDENT
BENJAMIN BOOTH COMPANY

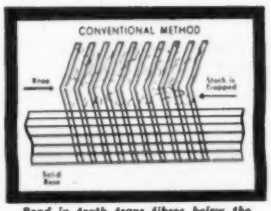
EXPORT BUYERS

Save time—money—labor with *STRIP-O-MATIC* card clothing—now available for overseas sales. Your inquiries invited.

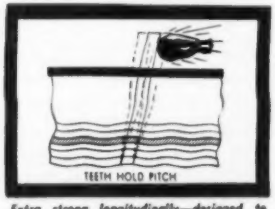
The photograph shows STRIP-O-MATIC following 9 months' operation without stripping. There isn't any accumulation of stock.



Straight Teeth aids the stripping action. Fibres cannot be trapped.



Bend in teeth traps fibres below the knee of the teeth.



Extra strong longitudinally—designed to cushion the effect of blows.

Established 1892

Booth

BENJAMIN BOOTH COMPANY, ALLEGHENY & JANNEY STS., PHILA., PA.

Starter Enclosure Is Smaller, Safer

A new combination Life-Linestarter class 11-206-N, that combines motor starter, motor protection, and disconnect in a redesigned enclosure to save space and to increase safety, is now available from Westinghouse Electric Corp., 306 Fourth Ave., Pittsburgh 30, Pa.

Designed for across-the-line starting of squirrel-cage induction motors, or as a primary switch for wound-rotor motors, this unit features the new Life-Linestarter, AB de-ion circuit breaker, and slam-proof self-indicating interlocked handle.

The new Life-Linestarter component is said to provide fast, trouble-free operation because of the simple action of a see-saw pivoted on a knife-edge bearing with a kick-out spring to insure positive opening.

With capacities from ½ to 100 hp., and 110- to 600-v. polyphase, the unit is available in NEMA sizes 0 through 4, and NEMA-type enclosures, 1, 1A, 3, 4, 5, 7 and 9.

Industrial Cleaner Operates on Vibration Principle

A new industrial cleaner that creates suction by the jet principle has been announced by Patterson Products, 518 Maccabees Bldg., Detroit 2, Mich.

An external stream of air can dislodge dirt from inaccessible places to where it can be picked up by the suction. Fingertip controls make the switch from blowing to suction easy for the operator.

Total weight of the Pick-A-Back unit complete is 7½ lb. Several sizes of castered tank models from 20 to 55 gal. can be had for wet or dry cleaning operations.

New Mechanical Packing Is Chemically Inert

A new mechanical packing said to be inert to acid, caustics, or other chemicals, including sulphuric, sulphurous, chromic, and nitric acids, has been developed by A. W. Chesterton Co., Everett, Mass. The packing, called Chesterton Blu-Lou, style 320, is 100% pure Cape African blue asbestos entirely free of the usual cotton content. Being completely immunized, the product has acid-resisting properties not otherwise attainable.

Dry Chemical Is Piped

Automatic protection of industrial fire hazards with a dry-chemical piped system has been announced by Ansul Chemical Co., Marinette, Wis. In operation, a heat-actuated device trips a nitrogen-cylinder release that pressurizes the dry-chemical container.

Automatic controls can be added to the system to close doors, ducts, valves, etc.

New Strap Cutter Fits Palm Easily

THIS STRAP CUTTER, designed to cut flat steel strapping up to ¾ in. x 0.35 in., has been developed by Acme Steel Co., 2840 Archer Ave., Chicago, Ill. The lower blade of the tool is flat for easy insertion.

Molded Packings Are Precision Made

A line of molded packings for hydraulic and pneumatic equipment has been announced by Periflex, Inc., Hazel Park, Mich.

Compression-molded from a fabric-and-neoprene compound, the packings are said to have good wearing qualities and resistance to many hydraulic fluids.

Glass-Block Improvements Speed Installation and Cleaning

Two improvements to reduce installation time and costs for Insulux light-directing glass block have been announced by American Structural Products Co., Ohio Bldg., Toledo, Ohio, an Owens-Illinois subsidiary.

The first improvement is a new finish applied to the exposed faces of the block during manufacture. Being water-repellent, the finish prevents adhesion of mortar to the faces during the laying operation.

The second improvement is an electronically applied gold stripe which now appears on the top mortar-bearing edge of each block. The stripe makes it easy to lay block in the correct position.

Vacuum Cleaner Has 35 Ft. of Hose

A new small, portable vacuum cleaner, incorporating the heavy-duty advantages of larger machines, has been added to the Hoffco-Vac line of portable units manufactured by the Air Appliance Div., U. S. Hoffman Machinery Corp., 105 Fourth Ave., New York.

The new machine, called the Hoffco-Vac No. 15, is a 1½-hp. machine that will operate one 35-ft. length of vacuum-cleaning hose. Over-all dimensions are compact; maneuverability in narrow aisles or congested areas is possible. Width is 21½ in.; length, 40¼ in.; and height, 43¼ in.

Oil Mist Keeps Bearing Cool, Saves Oil

Oil Mist, a system of constant and automatic delivery of lubricating oil to all types of machine bearings in "air-borne" microscopic particles through tubing, is now available from Alemite Div., Stewart-Warner Corp., Chicago, Ill.

Virtual elimination of the human factor in lubrication, drastic economy in lubricant consumption, and prolonged bearing life are claimed for the system as advantages over other lubrication methods.

The Oil-Mist lubricator, attached to each machine, is slightly smaller than the oil filter on a passenger automobile. In operation, there are no moving parts. The lubricator, by mixing air and oil, converts oil to mist form. A baffle plate separates out large droplets. Only a mist that resembles cigarette smoke passes through the lines. Oil particles are so fine that they cannot be detected in the mist even by ultraviolet light.

The new lubricators are available for use with any mill air line. Maximum air consumed is approximately 1 cu. ft. per min. A similar lubricator with built-in compressor is planned.

The Oil-Mist system is rated at 30 bearing inches per lubricator unit, the maximum number of bearings not to exceed 60. In one application, one unit will lubricate twenty points.

Lens-Cleaning Tissues

Silicone-treated tissues for cleaning goggles and glasses have been developed by General Electric Co. and Silicone Paper Co. of America, Inc., 230 Park Ave., New York. Sheets are interfolded for handling in a dispenser if desired.

Floor-Maintenance Compound Holds Dust Down

A new method of floor care that holds dust down through use of Antiseptic Westone has been developed by the West Disinfecting Co., 42-16 West St., Long Island City 1, N. Y.

The West company claims management has found that use of Antiseptic Westone has resulted in reduction of dust damage to machinery, instruments, materials, and products during manufacturing operations and storage; less absenteeism; economical restoration of floors to their original beauty; a reduction in maintenance costs; and in generally increased sanitary conditions.

Antiseptic Westone is formulated for preservation of floor surfaces, enhancement of floor beauty, and elimination of dust. It is said not only to remove dust from floors but also to leave an antiseptic film that inhibits the growth and multiplication of the bacteria present. Its surface-sealing film holds down subsequent dust for quick and easy removal.

ANOTHER DOW CORNING SILICONE PRODUCT

DeCetex 104

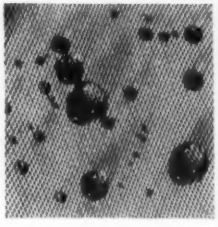
the most durable water-repellent for synthetic fabrics

Here's the kind of durability you have been looking for in a water-repellent treatment for synthetic fabrics. Materials that have been the most difficult to treat—acetate, viscose, nylon, Orlon, Dacron and mixtures of natural and synthetic fibers—can now be given a durable water-repellent finish. And by durable, we mean a treatment that will retain a spray rating of 90 to 100 after 10 dry cleanings; 80 after three 2-hour launderings.

There's no change in porosity, color or colorfastness. The silicone finish is free from mark-off; it imparts a full, soft "hand" and it has a stabilizing effect on some materials.

Furthermore, DeCetex 104 is easily and inexpensively applied from a water emulsion with conventional equipment. You do not have to wash or neutralize the treated fabric and it remains odorless even after aging.

In an ounce of DeCetex 104 you get millions of invisible silicone umbrellas that don't fold up after the first two or three dry cleanings. If you are not already familiar with DeCetex 104, write for technical data sheet AJ-11.



This DeCetex treated fabric looks and feels like any ordinary nylon marquisette with a weave as open as a window screen. But water rolls over the fabric unable to wet the fibers.

She's wearing her umbrella of DeCetex treated rayon skarkskin. All she has to do is brush the little droplets off her suit, and she'll be as dry and look as fresh and neat as ever.

ATLANTA • CHICAGO • CLEVELAND • DALLAS • LOS ANGELES • NEW YORK • WASHINGTON, D. C.
In Canada: Fiberglas Canada Ltd., Toronto • Great Britain: Midland Silicones Ltd., London

FIRST IN SILICONES
DOW CORNING CORPORATION
MIDLAND, MICHIGAN

Torque-Arm Reducer Available in Four Sizes

A torque-arm reducer for output speeds from 115 to 330 rpm. has been announced by Dodge Mfg. Corp., Mishawaka, Ind. Claimed to be the only shaft-mounted reducer designed for this speed range, the new single-reduction unit is being produced in four sizes that cover capacities up to 27 hp.

The compact unit is locked securely to the shaft-to-be-driven by means of two steel locking collars—one on each side of the reducer. The unit is anchored to the floor or any fixed object by the torque-arm.

While this new reducer can be driven through any V-belt drive, the designers recommend stock Taper-Lock Sheaves for facility of either installation or removal and for maximum efficiency of operation. A flat-belt drive can also be used.

Any required output speed within the recommended range of 115 to 330 rpm. can be obtained with stock sheaves properly related in size. Variations of that speed are accomplished simply by changing sheave sizes.

Accurate adjustment of belt tension can be made quickly and easily by operating the turnbuckle in the torque-arm.

Transferring the unit from one machine to another is simplified by the use of interchangeable shaft-keyed bushings which adapt shaft sleeves to different shaft sizes.

Steel Strapping Dispensed And Cut by New Holder

Stationary and portable models of a new dispenser for Unit-Load steel band are now being marketed by Acme Steel Co., 2840 Archer Ave., Chicago 8, Ill. Both models can hold and cut to length one or two coils of Unit-Load band, used to reinforce shipping containers and to brace carload shipments. The dispenser speeds up applications of cut-to-length strapping.

Bands are cut in a single, low-effort downstroke of the 30-in. hand lever. The problem of over-running band is minimized by a V-belt-controlled feed. An efficient shear mechanism features tool-steel blades, easily accessible for service or replacement.

Any two-coil combination of ¾-in., 1¼-in., or 2-in. band in all thicknesses can be handled by the dispenser.

Fiber Strapping Withstands 275-Lb. Pull

A new strapping, Fiberstrap, which stands a 275-lb. pull, has been announced by A. J. Gerrard and Co., 1950 No. Hawthorne Ave., Melrose Park, Ill.

The strapping is produced in the standard ½-in. width, 0.040-in. thick. It is available in 25-lb. coils, 1,750 ft. long. Price compares with lightweight steel strapping.

55-Gal. Drum Is Collapsible

A new 55-gal. synthetic-rubber-fabric drum for shipping liquids has been announced by U. S. Rubber Co., Rockefeller Center, New York 20, N. Y. The drum can be collapsed after emptying, is returnable, and is reusable. Sizable savings in return shipping costs are claimed with the new drum. More than 2,500 collapsed drums can be shipped in a standard railroad box car that would hold only 300 rigid drums.

Experimental tests made by the maker indicate that the new drum will be suitable for the shipment of oils, greases, fats, acids, paints, emulsions, soaps, dry powders, and a variety of industrial chemicals.

The drum, made of Ustex cord fabric impregnated with synthetic rubber, is molded in one piece. (Ustex cord is a strong, low-stretch cotton textile made by U. S. Rubber Co.) The result is a tough, flexible drum approximating the size of a regular barrel or drum. It is equipped with simple fittings for filling, emptying, lifting, and handling.

Liquid Meter Shuts Off Automatically

A new Auto-Stop liquid meter has been announced by Neptune Meter Co., 50 West 50th St., New York 20, N. Y. The Auto-Stop Meter consists of the new model-432 register mounted on the Neptune liquid meter, coupled with a quick-closing valve. This meter, inserted in the line near the washers or other processing tanks, automatically shuts off the flow after a predetermined quantity of liquid has been delivered.

Typical applications of the new meter are:

1. Accurate measurement of soap solutions to washers and fulling mills in woolen and worsted mills.
2. Accurate measurement of water to starch-cooking kettles.
3. Measurement of warm, hot, or cold water into all kinds of batching and processing operations.

Intercom System Is Self-Powered

A line of self-powered inter-communication systems has been announced by Wheeler Insulated Wire Co., Inc., Waterbury 91, Conn. No external power source is required for the telephone system, and no batteries are used.

Rotary Brush on Sweeper Cleans to Wall

A new rotary brush for cleaning floors right up to the wall and for cleaning in corners has been added to the floor sweeper made by Parker Sweeper Co., 81 Bechtel Ave., Springfield, Ohio. Sweepers are made in 20- and 28-in. sweeping widths.

"Black-Light" Fixtures Cause Fluorescence

A new line of Blak-Ray, high-intensity, long-wave, ultraviolet lamps with applications in the textile industry has been announced by Ultra-Violet Products, Inc., S. Pasadena, Calif.

The invisible "black-light" rays cause certain materials to fluoresce. Variations that are invisible, or nearly so, in ordinary white light stand out with startling clarity when exposed to the Blak-Ray.

Available in 4-, 8-, 15-, 30-, and 80-w. sizes, the Blak-Ray fixture may be rested on a flat surface, mounted flush to wall or ceiling, or hung from brackets. The 4- and 8-w. sizes have a special trunnion-type ball that allows them to be tilted to any position within a 180° plane of the mounting surface. These models may also be used as portable inspection lights, as they weigh only 1¾ lb. and have an over-all dimensions of 3¼x4x6½ in.

Mechanized Floor Sweeper Is Battery Powered

To help shove textile-mill floor-sweeping costs down where they belong, G. H. Tennant Co., 2586 N. Second St., Minneapolis, Minn., has come up with something new—a one-man battery-powered sweeper that makes a U-turn in 3 seconds, sweeps 20,000 to 47,000 sq. ft. per hr.

With this machine, say its makers, you can scoot through a cloth room, warehouse or other open area at 3 mph., picking up dust, lint, and waste on the run. Other applications are sweeping walks, driveways, cloth-storage rooms, etc. A 36-in. brush inside a special compartment does the job.

The new sweeper runs 4 to 6 hr. without recharging and is powered by a 36-v. battery. Its 2-hp. electric motor connects to gears that allow a top speed of 3.09 mph.

Water Seepage Cut With New Compound

A new compound, called Dashide, which penetrates into porous walls to seal cracks and expands to fill the pores that cause water penetration, has been developed by Dasco Co., Inc., 1602 Thames St., Baltimore 31, Md. Dashide is a transparent material, resistant to acids and alkalis. One gallon covers about 100 sq. ft. with two coats.

Versatile Vacuum Cleaner Handles Wet or Dry Dirt

A new, portable, heavy-duty vacuum machine has been developed by Hild Floor Machine Co., 740 Washington Blvd., Chicago 6, Ill. Designed for both wet and dry pick-up the unit employs a by-pass motor that does not depend on the air stream for cooling. Thus, the motor cannot be damaged by the dust or moisture picked up by the vacuum. No adjustments or change of parts is necessary for either type of dirt.

TREES AND TIRES may appear to have little in common. Actually, more than two-thirds of the tires made in this country today depend upon wood to provide longer life – added safety – and lower cost.

The strong tough cords and fabric around which these superior tires are built are made of viscose rayon yarn produced by chemically converting highly purified cellulose derived from wood.

Rayonier supplies the yarn producers with a type of purified wood cellulose specially developed to help assure production of yarns with the high strength and fatigue resistance required by tire manufacturers.

RAYONIER
INCORPORATED

Producers of highly purified wood cellulose for textiles, tire cord, cellophane, plastics

EXECUTIVE OFFICES: *122 East 42nd Street, New York 17, New York*
MILLS: *Hoquiam, Port Angeles, Shelton, Washington; Fernandina, Florida*

Pointers FOR SUPERVISORS

How the Management Team Can Build Better Human Relations

It's Up to You To KEEP YOUR MEN POSTED

▶ Workers have to be told about a lot of things that affect their industry, their company, and their own jobs. It's a foreman's responsibility to see that his men get the facts and understand them. Here is some practical advice on how to tackle a big job that will pay off in better worker attitude and conduct on the job.

By MACON P. MILLER
Director of Industrial & Public Relations, Fieldcrest Mills

THE FOREMAN OF TODAY is in the position of having so much to communicate to his employees that he may have difficulty finding the time and the means for passing it along.

The need for transmitting information to employees is greater than ever. The employee should know, for his benefit and the company's benefit, the company rules, policies, and procedures affecting him; the current economic situation as it affects the country, the company, and himself; the company's competitive position, the factors that influence it, and his share in it; the current state of the company's business; legal provisions governing employee-company relations; union-contract provisions; waste, efficiency, and quality data involving his department and job; and a multitude of other items.

Good selection and training will help put the right men on the job and enable them to develop the necessary skill. Beyond that, the employee's level of production and conduct on the job is largely dependent on his attitude. And attitude develops largely from information.

Keep Yourself Informed

The objection may be raised that a foreman would have to be a college professor to know and understand all these matters himself. There is no doubt that considerable study is required. As a first step, the foreman must master the data himself before he can pass it along to his employees.

There can be no question that a foreman needs to be well informed. The major problem is how to pass along information to employees. The very volume of information that piles up on the desk day by day makes the task of communication more difficult. The paper may accumulate to the point where it cuts into the time a foreman would like to spend in face-to-face contact with his workers. It may take so much time for the foreman to keep himself posted that he has little opportunity to pass the word along to his men.

Plan Your Message

The alternatives aren't very inviting. If the foreman doesn't do the job, the employees will be unaware of certain facts important in the forming of favorable attitudes. Or they will pick up the "facts," along with misinterpretations, from other sources. All foremen know that workers can pick up astounding "information" from equally astounding sources.

So the foreman has got to do the job. But since it's a big job, he should organize it and get the help he needs on it. Informal contact with individual employees is probably the best technique, but there are other methods that are very effective in certain cases.

The foreman should consider the nature of the information he wants to impart and then plan his method for imparting it.

Get It Across

As a case in point, let's assume the foreman wanted to pass along information on a waste-control program. Here is a procedure that we have seen work out:

1. The foreman called small group meetings, by separate job classifications, of all employees in the department. He presented data on what waste was costing the department and company, what waste reduction would mean to employees, and what specific steps employees in each classification could take to reduce waste. These steps included suggestions made by employees during the meetings. The foreman received help from staff departments in collecting data and preparing visual aids. But he presented the data himself.
2. Up-to-date charts, with weekly entries, were posted in the department to inform the employees on the progress of their waste-control efforts. But no data was posted that would serve as a public reprimand of individual employees.
3. In those classifications where waste continued high, the foreman and his assistant foremen discussed the situation informally with individual employees. Similar individual contact was made to compliment employees in classifications where waste was reduced.
4. The foreman also held follow-up group meetings to discuss progress with employees.

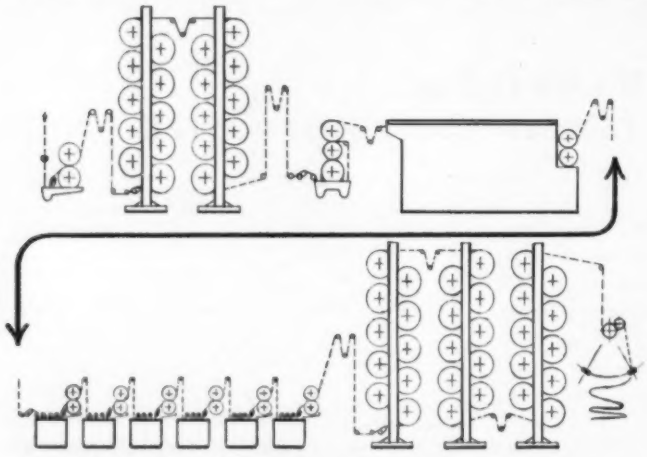
This procedure may not be the best one for all types of information. It is presented merely to show that an effective job can be done with proper planning.

(*Continued on page 256*)

(ADVERTISEMENT)

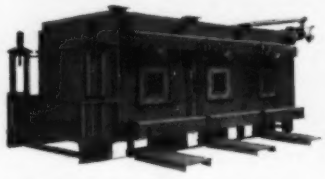
Cook P&N STEAM-PAD DYE RANGE

For All Fabrics and Warp Dyeing



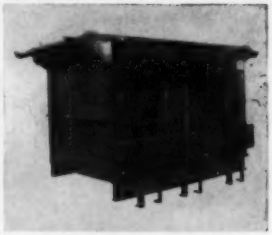
We now have in operation ranges of from 50" to 110" face on cotton, rayon, acetates, corduroys, wool blends, etc. From our own shops we can supply modified or complete ranges to fit your requirements.

COOK Internal Tension Control (Patent Pending) makes possible successful operation of any size Ager

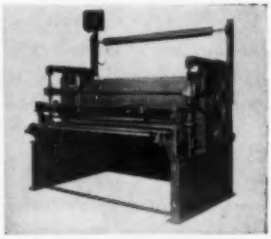


Our latest addition to the COOK Steam-Pad Dye Range is an Ager (5623–1) with *automatic internal tension control* (Pat. Pend.) which permits processing of even fine rayons without damage. This machine has an entrance seal which really seals, a steam-heated ceiling which really eliminates drips and provides uniformity of steam conditions. Many millions of yards of broadcloths, corduroys, work clothes, wide sheeting, rayon dress goods and even wool blankets have been processed through COOK Steamers. From the very beginning of the Steam-Pad Dyeing Process, COOK has played an important role in its successful development. Individually or as a complete range the representative machines shown here can be relied upon to produce a maximum amount of goods per dollar invested.

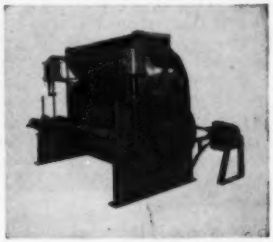
All COOK machinery is fabricated in our own shops allowing design flexibility *without* premium cost. Stainless steel fabrication eliminates broken castings and factory-made repair parts. All machines are guaranteed to perform as specified. Your request for information will receive prompt attention.



COOK Continuous Desizing Ager (4860-1) provides a uniformly saturated atmosphere and handles the material without wrinkling or excessive tension. Smooth flow with COOK Automatic Tension Control (Pat. Pend.). Entrance and exit steam seals which really do seal. Made in floor or ceiling type. Also available as combination Desizing and Dyeing Steamer.



2 Roll Padder (5602-2) Sturdy box-type frame, fool-proof pressure control and reliability make this padder increasingly popular where absolutely level padding is required. The lever-set pressure control is greatly improved to eliminate any binding and includes a new design roll separator. In 5, 10, or 15-ton capacity and any desired width.



3 Roll Padder (2947-1) Pneumatic pressure control with latest air cylinder design provides uniform and accurate pressure on each side. Single or dual control panel. Nip roll designs engineered to eliminate deflection. Rolls mounted in self-aligning spherical bearings. In 5, 10, or 15-ton capacity with infinitely adjustable pressures. Any desired combination of stainless steel and rubber covered rolls.

COOK-P & N MACHINE CO., INC., 365 Dorchester Ave., Boston 27, Mass.

Exploring

The Textile Community

By MILDRED BARNWELL ANDREWS

TRAINING FOR PROMOTION Pays Off Two Ways

▶ On-the-job training of veterans has convinced this mill it's worthwhile for all employees. A case history shows that both trainee and employer have profited from a well-planned program.

MILDRED ANDREWS

After a long and arduous summer, it was almost too good to be true to be down at Sea Island, Ga., resting, loafing, and listening to the ocean roar. Sea Island, now known for its resort and recreation facilities, was once better known for its cotton. Over Sea Island five flags have flown. Blood has been shed, battles have been fought, and campaigns waged for its possession. Poems have been written about its beauty and charm, its famous Marshes of Glynn.

On this historic island the first long-staple, silky Sea Island cotton was grown at beautiful Retreat Plantation. Where slaves once toiled to make its crop the world's best and most desirable, strangers now come to play golf on one of the country's finest courses. Retreat's historic past mellows the charm of the present, and always there hovers over its current activities the ghostly whisper of what used to be. What of the cotton that made it famous? What of the mills that spun the Sea Island staple? What of the people who fostered its industry?

In that atmosphere, when I met up with my old friend, the president of the Graniteville Co., we soon switched the conversation from beach and golf to cotton of yesterday and mills of today. Progress in jobs and in job training, he told me, is the answer to the continuation of any good industry.

An Old Policy Brought Up to Date

"We have always believed in training in the mill and promotion from within the organization," he said. "Graniteville Co. has long been noted for its educational programs, but since World War II we have put special emphasis on vocational training through our veterans' program. Since July, 1951, according to law, no GI may enter training without prior commitment, but we have had such good results from the program that we intend to carry on under our own job-relations plan."

Graniteville established its veterans-training program in February, 1946. A veterans' counselor was appointed by the mill, and the duties and responsibilities of the trainees and of the employer were carefully outlined and have been strictly adhered to. Opportunity to participate was offered to the more than 700 vets who returned to the mill's employment rolls. Of the 138 trainees who have enrolled in the past five years, 88 have completed their training and have been awarded certificates; 71 are now working for the company on the jobs they were trained for. Ten veterans are still in training.

Three Years' Work in One

Many of the vets completed their training in just about two-thirds of the time allowed for the course. One man completed the entire three-year course in less than one year. He got off the GI payroll two years ahead of time, but he more than made up for that by his job promotion and the resulting higher pay.

Men who are outstanding in one type of activity may also excel in others. For example, the veterans' counselor told me, one boy who had served with the Marines for six years came home with a promotion and several citations. Early in 1947 he returned to his job at the mill, and two months later started the on-the-job training course. Two years later he was making just about three times as much money and had been promoted to foreman of his department.

"Another who left us for the Army in 1941 served for four years and returned to work in 1946," the mill executive said. "He was a hard worker at his on-the-job training, completed the course in record time, and has had steady advancement ever since. He's gone up from helper in the cloth room to foreman.

"These boys might have been advanced in time without the training; but with it they have made outstanding records, and we feel the training was instrumental in their promotions," he continued. "It has made them worth a lot more to the company, and it has given them pride in their work and satisfaction in their achievements."

The Graniteville Co. opened its sixth on-the-job training course in October. Several former trainees have graduated to instructors.

Success is mighty fine to have, and it is seldom an accident. On-the-job training for vets and non-vets is often a short-cut to success, and it works two ways: It's good for the trainee, and it's good for the mill that provides the opportunity.

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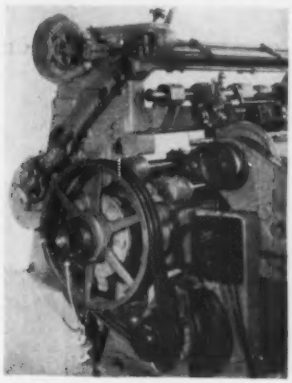
TEXTILE Equipment NEWS

Reiner Announces New Tricot Model



ONE FEATURE OF THE MODEL RT-4 is the improved drive, with end-motor mounting. You can see the enclosed beam-brake control in this picture.

Model RT-4, a new tricot-knitting machine, has been introduced by Robert Reiner, Inc., Weehawken, N. J. The machine is said to make quality control easier and also to make operations easier with less handling.

Particular attention has been given the elimination or reduction of shade and stop marks, and to the construction of special fabrics by improved brake controls or automatic beam-feed devices.

The RT-4 has an automatic beam let-off transmission and a warp-tension adjuster. Knitted fabric is taken up automatically. An electro-mechanical brake-clutch with a needle-down disk is said to reduce stop marks.

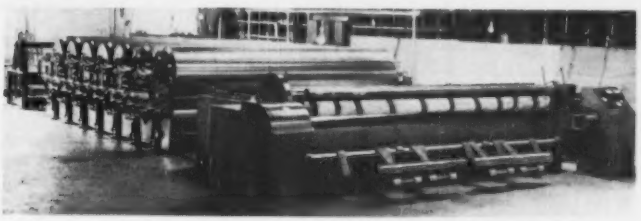
There is instantaneous cam-brake action, and the motor power has been increased from 3 to 5 hp. for a quick, level start. The machine has automatic oil-feed lines throughout. Two-bar units can readily be changed to three-bar units by means of split cams.

An automatic guide-bar lift with safety controls shuts off power when the guide bar is up. Oil splash is eliminated by completely enclosing the cam shaft. The maker also claims that a new beam arrangement provides more space between beams and more space from the floor to lower beams.

One beam has a brake to allow making special fabrics. Knitting width of the new model is 168 in.

The new machine is available with long needles for coarse-gauge fabrics. It can have either pattern-wheel or chain-link drive.

King-Sized Slasher Built for Carpet Mill



SPEEDS UP TO 125 YD. PER MIN. are possible with this new slasher designed for heavy warps.

An extra-large slasher especially built for one of the nation's largest carpet manufacturers was recently described by the maker, Cocker Machine & Foundry Co., Gastonia, N. C.

The size box is all stainless steel, steam jacketed, with open coils inside the box. Immersion rolls are stainless steel also, and both these and the large-diameter, rubber-covered top quetsch roll have a 160-in. face.

Drying section of the big slasher is of heavy cast-iron construction. Thirteen stainless-steel cylinders, of 30-in. diameter, are carried in roller bearings and are driven by cut sprockets and roller chain. The 160-in.-long cylinders also have rotary packless joints, with steam injected into both ends of each cylinder.

The slasher head end is of very heavy cast-iron construction and is powered by a 25-hp. d.c. motor. A new type of air-controlled friction device is used, and the presser roll is also operated and controlled by air.

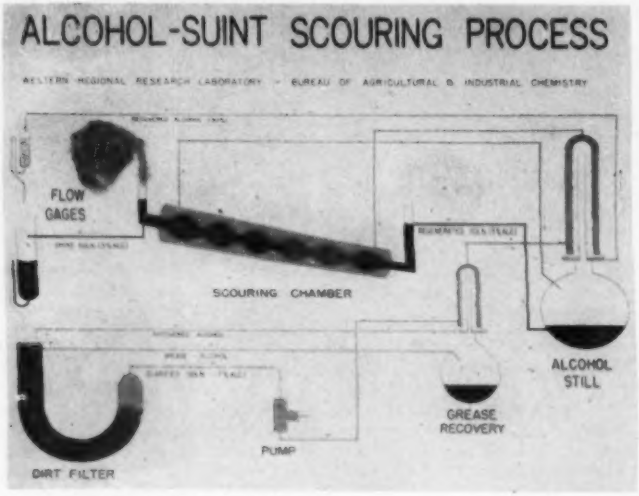
The head end is designed to take one 144-in. loom beam (measured between flanges), two 72-in. beams, or four 36-in. beams.

Combination Extractor-Dryer Halves Time, Space

A Stienen Obermaier combination high-speed extractor-dryer that can cut total drying time by more than half over other systems and that can be used by even the smallest package dyer to advantage has been developed by Standard Fabricators, Inc., 355 Walton Avenue, New York, N. Y. The quick drying done by the machine is said to mean a faster turnover of yarn in the dyehouse, elimination of bottlenecks, and reduction of production time by half. Only half the normal floor space and half the number of material carriers are required.

In actual operation, the material carrier is removed from the dyeing machine and placed in the extractor-dryer. In small installations, the entire operation will be concluded in the one machine; the entire cycle requires approximately 1¼ to 2 hr. In larger installations, the extractor-dryer is used in conjunction with the new Stienen high-speed port-system dryers that accomplish the drying operation in the same fast time as the combination machine.

New Type of Wool-Scouring Process Developed



HERE'S HOW THE NEW PROCESS WORKS. Raw wool enters at the left, and scoured wool leaves at the right. Present equipment may be adapted.

A new type of wool-scouring process has been developed on a laboratory scale by Western Regional Research Laboratory, U. S. Dept. of Agriculture. The new process, using suint and alcohol, is said to reduce felting, increase by-products recoverable, and relieve the stream-pollution problem.

Developed under the direction of Dr. Harold P. Lundgren, the basic idea of the process is utilization of the inherent scouring action of suint, a mixture of water-soluble components of grease wool. These components, like soaps, contain potassium salts of organic acids. The basic cleaning process is the same whether soap or suint is used.

The experimenters found that alcohol improved and made more reliable the scouring action of the suint. The effect of the alcohol can be accentuated by a controlled amount of salt.

Normal butyl alcohol was chosen for the process because its boiling point is above the melting point of the grease and below the temperature where felting becomes significant. Relative availability and costs were also considered. A 3% solution used at 60° C. is the best concentration.

Further addition of alcohol, to about 7%, saturates the water and causes the emulsion to break, the grease and dirt to separate. The alcohol concentration can then be readjusted and the solution used again. If the grease wool is very low in suint, it may be necessary to prime the scouring liquor with suint or soap.

The concentration of suint tends to build up and must be removed from time to time to prevent discoloring the wool. The wool is finally rinsed with water after scouring.

These principles have been applied in a laboratory-model, continuous-countercurrent, wool-scouring apparatus that precipitates the grease and dirt, readjusts the alcohol concentration by distillation, and recycles the scouring liquid.

Advantages claimed for the new process are:

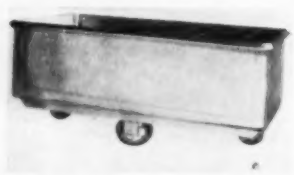
1. By being carried out under neutral conditions, the process reduces felting and fiber damage.
2. Recoveries of grease and suint are made separately and easily.
3. The solvent is relatively non-toxic and non-volatile; it is recycled but does not need to be completely redistilled for each cycle.
4. There is no pollution-control nor waste-disposal problem.
5. Relatively little floor space is required; present scouring equipment may be adapted.
6. The alcohol inhibits putrefaction.
7. The process is estimated to be cheaper than solvent scouring.

Among the disadvantages of the new process is the extremely detrimental effect of water hardness on residual grease content (100 parts per million of calcium may raise the residual grease content to 2%). Initial cost is also high.

Pilot-plant operation and investigation of the system are now being sought. Several companies have indicated an interest in the project.

The Eastern Regional Research Laboratory is now working on the commercial possibilities of recovered wool grease. Further information on both projects is available from the laboratories involved.

Stainless-Steel Truck Has Textile Applications



ROUNDED CORNERS are one reason this tub-type truck is easy to clean.

A tub-type truck of stainless steel has been developed by Market Forge Co., Everett, Mass. The truck has features that should interest bleaching, dyeing, and finishing plants.

The inside of the truck is carefully finished and polished to resist corrosion. All corners are rounded. Top edges are reinforced to stiffen the sides and resist damage. A removable plug allows contents to drain.

Any type and arrangement of swivel or rigid casters can be furnished. The structure on which the truck is mounted may be attached permanently or as a removable unit. Bearings are equipped with seals to prevent dirt from entering and grease from escaping.

Capacity of the truck is 1,000 lb. Inside dimensions are: length, 60 in.; width, 26½ in.; depth, 16½ in. Wheels may be cushion or hard rubber, aluminum, plastic, or semi-steel.

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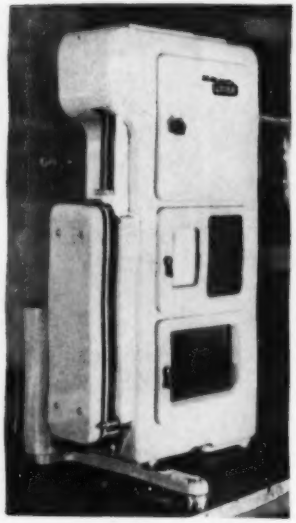
Uster Announces Three New Yarn Testers



AUTOMATIC STRENGTH TESTER shows six values related to the single-end tests made. The machine has six interchangeable ranges for breaking strength and three interchangeable ranges for elongation.

Three new yarn testers, an automatic strength tester, an evenness tester for filament, and an evenness tester with a linear and quadratic integrator have been developed by Uster Corp., 2516 Wilkinson Blvd., Charlotte, N. C.

The strength tester, for single-end testing, is automatic in operation. Once started, it frees the operator for other duties and eliminates the human element from the testing operation.

The tester indicates individual values of the breaking strength, individual values of the elongation, sum of the breaking strength, sum of the elongation, frequency distribution of the breaking strength, and the number of tests carried out.

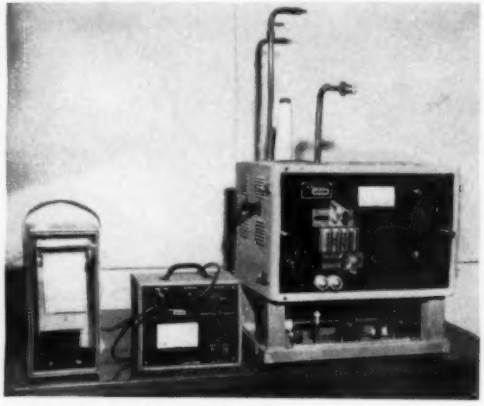
Features of the machine are: six interchangeable ranges for breaking strength from 0 to 200 gm. to 0 to 2,000 gm., three interchangeable ranges for elongation from 0 to 10% to 0 to 40%, and a constant rate of loading that is adjustable. The count of the yarn being tested can also be determined.

A new evenness tester, Type C, is designed for use with filament yarns. The tester determines the evenness of filament materials of zero or low twist at speeds up to 100 yd. per min. The tester can also be used on high-twist filament materials and on spun materials of between 10 and 10,000 den.

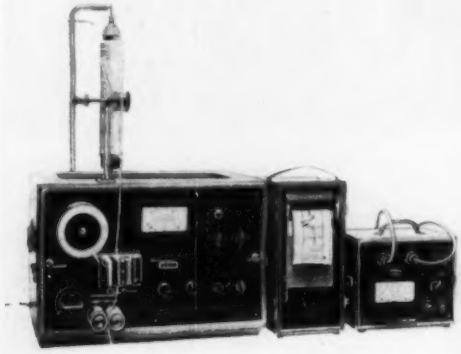
A new universal tester is designed for use on all spun materials—cotton, wool, synthetics, blends, etc. The new tester has a wider range than previous models, is extremely stable, and is equipped with a new high-response recorder. Tests may be run at up to 100 yd. per min.

In addition to the linear integrator with which most of the Uster testers are equipped, there is now available the quadratic integrator. This unit automatically calculates, while the test is being run, the coefficient of variation. Most scientists and laboratory men prefer this figure, but have not been able to use it practically because of the tedious mathematics involved.

In taking the square root of the squares of the variation and showing this directly as a percentage, the quadratic integrator saves hours of work on each test, and shows this figure while the test is running.



CONTINUOUS-FILAMENT MILLS should find wide use for the new Type-C tester for zero or low-twist materials.



ALL TYPES OF SPUN YARNS can be tested for evenness on the new and more versatile universal tester.

Electric Brakes Synchronize Brushes on Brushing Machines

A new series of electric brakes for brushing machines, said to increase output and improve quality, has been developed by Warner Electric Brake & Clutch Co., So. Beloit, Ill. The new series of controls is comprised of eight electric brakes, one mounted on each brush roller. The eight brushes are synchronized and are controlled by a single pushbutton.

Previously, when the brushing machine was stopped, the rollers continued to coast, and excessive wear on the cotton cloth and jamming of machines with excess cloth between the rollers resulted.

With the new brakes, the brushes can be stopped instantaneously as one unit. The company says excessive rubbing of the cloth through machine stoppages has been eliminated.

Amazing Service

It's the toughness of Textile Spring-Beard Needles that accounts for their amazing service in the machine. This toughness is built in—with a special steel formula, proper tempering, and the careful balancing of needle resiliency and needle length.

Dependable service is one of the many advantages obtained through Textile's quality controls—automatic and electronic—which constantly check each stage of production. You can see the results in longer-lasting needles, better hosiery fabrics, bigger profits.

TEXTILE MACHINE WORKS, READING, PENNA.

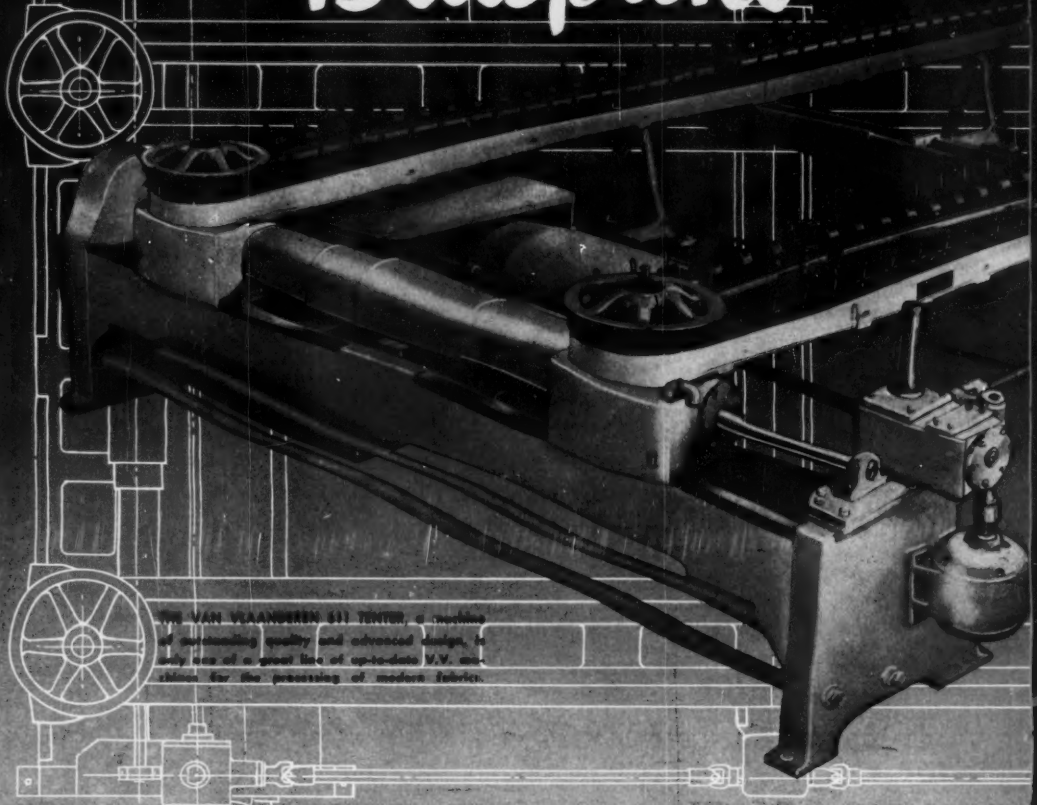
Textile

SPRING-BEARD NEEDLES

For Full-Fashioned Knitting

For Tricot Knitting

We Put it in the Blueprint



THE VAN VLAANDEREN 611 TENTER, a machine of outstanding quality and advanced design, is only one of a great line of up-to-date V.V. machines for the processing of modern fabrics.

Before designing the V.V.611 Tenter our engineers studied with critical eyes the tenters then in use — including our own — and concluded:

that many tenters were too lightly built to resist the punishing vibration of thousands of pounds of whirling chain and the high temperatures frequently employed.

that existing standards of workmanship and materials were deficient for the type of service that tenters must withstand.

that out-of-date designs were not delivering quality performance with the greatest yard for yard economy.

Our engineers deliberately set out, right from the blueprint stage, to design a tenter that would embody, in one machine, massive ruggedness and advanced engineering design. The 611 Tenter, built to the high calibre of workmanship associated with Van Vlaanderen and of the finest materials, sets a new standard for increased production, quality work and trouble-free service — delivering the greatest yard for yard economy of any tenter on the market.

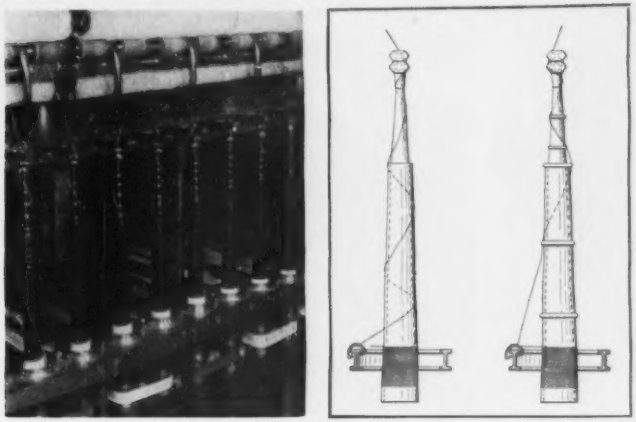
Write or phone to see the machine itself.

VAN VLAANDEREN

Van Vlaanderen Machine Company, 370 Straight Street, Paterson 3, New Jersey, U.S.A.

World's largest manufacturer of machinery for processing modern fabrics

Balloonless Spinning Improvements Announced



ON A PLATT SPINNING FRAME, the Zoba balloonless method is seen while in full operation (photograph at left). Earlier balloonless methods (left-hand drawing) had rather sharp angles for the yarn. Zoba system (right-hand drawing) uses an extended spindle with rings and a special bobbin to reduce friction and decrease yarn angles.

The idea of spinning without a balloon, which has been kicking around since 1884 when it was originally patented, has been further refined in Holland into what is called the Zoba system.

The new system uses a spinning head above the spindle, a specially lengthened spindle, and a special bobbin.

It is said that all types of yarn may be spun on the balloonless system—with a minimum production increase of 10%. Resultant yarn quality is also claimed to be higher.

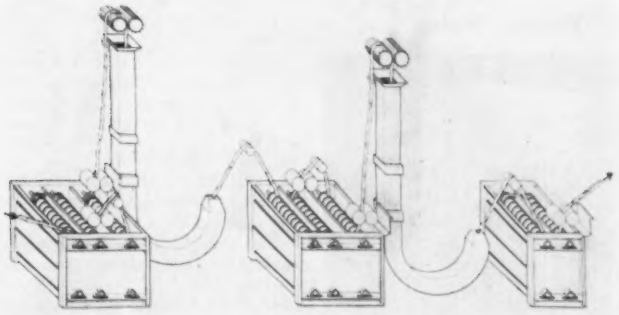
Thinking behind the Zoba system is something like this: The conventional system of spinning uses a balloon and the attendant centrifugal force. Yarn tension changes considerably during spinning, even with a traversing thread guide in operation. The balloon that still exists, it is claimed, causes excess strain on the yarn, limited spindle speeds, a need for separators, and high traveler wear. Why not, then, said the inventors, eliminate the balloon?

Early efforts met with little success because of excess friction that the yarn was subjected to in its screw-shaped course around the bobbin.

In the Zoba system, yarn leaves the front rolls conventionally and passes through a thread guide. Here the systems change. The new method has the yarn pass through a spindle head, and an auxiliary twist device. The overtwisted yarn then travels helically along the spindle and bobbin down to the traveler, where normal winding takes place. The spindle itself is enlarged and has rings on it—the only places where yarn actually touches the spindle.

Since the traveler functions only as a winding device, it is claimed that increased traveler speeds are possible. Yarn itself is said to be spun with less tension. End breakage is supposed to be less, and higher yarn counts can be spun from poorer grades of fiber.

Bleaching "Rangette" Uses Tensitrol Principle



A MODIFIED BLEACHING RANGE incorporating a specially designed combination Tensitrol rope washer-saturator to run at speeds of from 50 to 100 yd. per min. has been developed by Rodney Hunt Machine Co., Orange, Mass. Full benefits of tensionless handling and thorough saturation are said to be obtained with the overdrive principle of Tensitrol washing. The range is geared to a simplified drive arrangement that does much to reduce both initial and operating costs. Components can be set up in a variety of different groupings to fit customer requirements. Rodney Hunt offers a choice of Becco or Du Pont type J-Boxes.

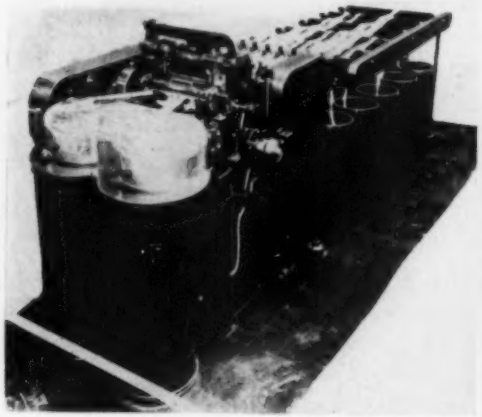
Concrete Patch or Mount Sets Hard in 15 to 30 Min.

Permanent repairs to chuck holes or breaks in concrete can be made during working hours with a product made by The Hallemite Mfg. Co., 2446 West 25th St., Cleveland 13, Ohio. According to the company, you don't have to wait for weekends or holidays because patches can be done during lunch or rest periods.

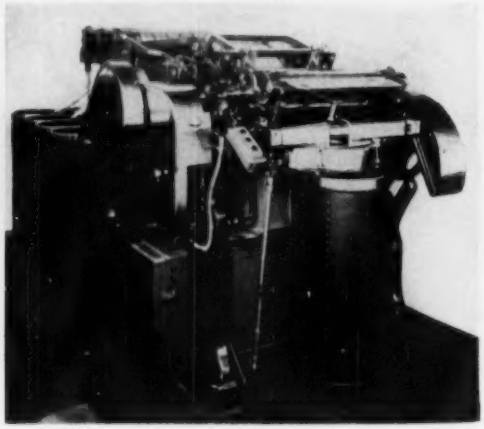
Called Por-Rok, the new product is self bonding, will not shrink, and requires no trowelling. The patch, ready for light loads in 15 min., can take normal trucking in 30 min. and heaviest loads within an hour.

Because the product is an oil-resistant cement, not an asphalt patch, it is said to hold anchor bolts more securely than if they were set in the original concrete base. Por-Rok is designed for use on interior surfaces that are not subject to more water than normal daily washing as is the case with some textile-mill floors.

Improved Rectilinear Comb Can Handle Long-Staple Synthetic Fibers



RECTILINEAR COMB that can handle long-staple synthetic fibers as well as wool has a rotating coiler that increases stock delivered into the can by 40%.



IMPROVED GILL BOX designed for use in conjunction with the improved comb has a coiler head for 36x15¼-in. cans and special rotating coiler heads.

An improved rectilinear comb designed for use on wool and synthetic fibers from 2 to 6 in. in length and a special gill box for use with the comb have been developed by Officina Meccanica Sant' Andrea, of Italy. U. S. representative is Ernest L. Frankl Associates, 22 E. 40th St., New York 16, N. Y.

The rectilinear worsted comb is equipped with can creel and can delivery for 15¼x36-in. cans. The comb also has a rotating coiler head at the delivery to provide for a greater consistency of the fibers as well as to permit an increase of 40% of the stock delivered into the can. The machine is also equipped with electric stop motions on creel and delivery, automatic lubrication, and special pinning to adapt it to all types of fibers.

The comb is constructed in 19- and 13-in. widths. In addition to combing and re-combing of wool, the machine can be used for the combing of staple carded synthetics or staple processed on the Pacific Converter.

In connection with the improved comb, this manufacturer also offers a special gill box providing for 36x15¼-in. cans, special rotating coiler heads on the delivery, stop motions, automatic lubrication, etc. This gill box is a high-production machine, especially suited for heavy-weight slivers, and can give a production of up to 145 lb. per hour.

A large number of the machines are being installed in a Southern mill where they will process synthetics of 4½- to 6-in. staple.

Stainless-Steel Tubes Useful in Dyeing, Drying

STAINLESS-STEEL DYE STICKS are resistant to the corrosive action of practically all types of dyes.

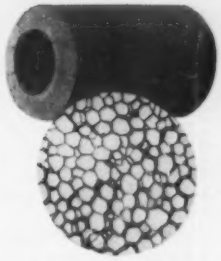
DRYING RACKS are also made of stainless steel tubing. The tube is strong enough to hold wet skeins.

Stainless-steel dye sticks and drying racks developed by the Carpenter Steel Co., Alloy Tube Div., Union, N. J., are being used successfully in handling delicate fibers in dyeing at Philadelphia Textile Institute.

The tubes are completely resistant to the corrosive effects of acid, chrome, vat, direct, and acetate dyestuffs.

The strength of the stainless steel is adequate when skeins are thoroughly soaked. The smooth, polished surfaces of the tubes are hard enough to resist scuffing or scratching that might harm delicate fibers.

In addition to using stainless-steel tubes as dye sticks, the Institute has equipped dryers with racks of the same material. The permanently smooth surfaces of the tubes are also required for this application.



HERE'S THE SECRET of cork's fine spinning surface. Millions of cork cells like these (here magnified 1200 times) act like tiny suction cups to hold a firm, steady grip on the fibers and so draft strong, uniform yarn.

This roll cover gets rid of eyebrows

If you're having trouble with eyebrows, you'll see a dramatic change the moment you put Armstrong's Cork Cots on your frames. Your difficulties with eyebrowing suddenly stop.

Why? Because these cork cots have a high-friction surface that continually pushes loose fibers well back under the clearer where they can't cause trouble. Furthermore, in many cases, these covers actually reduce clearer waste as much as 50%.

Armstrong's Cork Cots have what is considered by many mill men to be one of the finest drafting surfaces known. They hold a sure, firm grip and draft strong uniform yarn on even the finest counts.

Armstrong's Cork Cots are easy to install and maintain. They are made in one piece and pre-glued at our factory, ready to slip on your rolls in one simple operation. An occasional buffing keeps these covers spinning like new for two or three years on most counts and types of yarn.

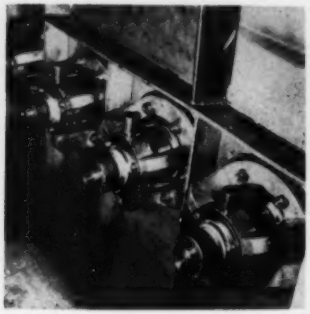
We'll be glad to put them to the test in your own mill. Just call your Armstrong representative today or write Armstrong Cork Company, Textile Products Department, 8311 Arch Street, Lancaster, Penna. Available for export.

ARMSTRONG'S CORK COTS

for high-quality spinning . . . at low cost

Open-Width Washer Has Overhead Rolls, New Seals

OVERHEAD IDLER ROLLS are now optional on the Tensitrol open-width washer. Arrow indicates new-type pressure cell.



NEW-TYPE SEAL (left) is said to practically eliminate loss of liquid around the journal of the bottom roll. Fingertip pressure on the seal (right) permits water to flush out lint and other debris.

The open-width Tensitrol washer made by Rodney Hunt Machine Co., Orange, Mass, is now available with an overhead frame on which top idler rolls are mounted. This design is offered as a choice along with the model having idler rolls mounted directly on tub ledge. And, for additional flexibility, counterflow water partitions are now so designed as to be removable.

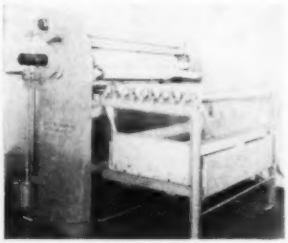
Important advantages in operating efficiency and maintenance are being obtained with two new mechanical devices, the company claims.

A new-type pressure cell replaces the air cylinder for applying pressure on light and medium squeezers (indicated by arrow). When the machine is turned off, the lower roll, now connected with the new pressure cell, drops away from the top roll automatically, thus preventing damage to rolls from their contact while not in use. Also, side-to-side pressure differences are eliminated because friction surfaces that might affect pressure on either side are reduced, it is claimed. Exhaustive tests made in the Rodney Hunt laboratory indicate that the life of the cell will be equal to many years of operation in the average mill.

The driven bottom rolls are now faced with a new type seal. The company says that this seal practically eliminates loss of liquid around the journal of the bottom roll. At the same time, friction is reduced, and braking action against the bottom roll is held to a minimum. An appreciable drop in power consumption has been recorded where these seals have been installed, the Rodney Hunt people report.

A touch of the finger will release seal pressure and allow water to flush away lint or other debris from the bottom of washer.

Rolls of New Padder Don't Need Crowning



RESINS OR OTHER COMPOUNDS can be applied to fabrics in this new padder.

A new quetsch, or padder, that has a capacity of up to 15-tons pressure has been announced by Birch Brothers, Inc., 32 Kent St., Somerville 43, Mass. Pressure in the new machine is applied through air cylinders and a special lever system.

The bottom or driven roll of the machine is rubber covered and the top roll is stainless steel. With this arrangement, printed goods are said not to mark off onto the top roll. For ordinary applications, however, the bottom roll is stainless steel, and the top roll is rubber covered.

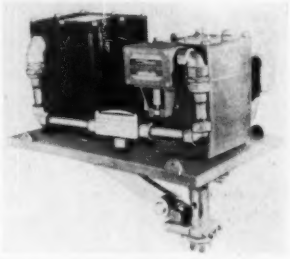
Birch Bros. has never had to crown the rubber roll, so rugged is the roll construction. An extra-heavy shaft runs through the rolls, which are mounted in self-aligning roller bearings. Levers in which the top roll is mounted are of semi-steel castings. A pair of long-life rubber expanders precede the squeeze rolls.

On the entering end of the machine is a stainless-steel tank fitted with an apron to catch the liquor from the squeeze rolls. The tank has a partial steam jacket to keep the liquor at the desired temperature.

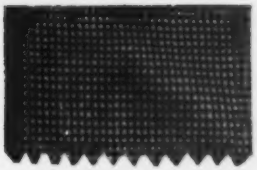
Immersion rolls are stainless steel.

Delivery end of the new padder is fitted with a built-in compensator that regulates the machine speed when it is set in a range with other equipment.

Viscometer Elements Measure Viscosity Under Pressure



NEW MEASURING ELEMENTS, Models M5 and M6, for its viscometers, have been developed by Norcross Corp., 247 Newtonville Ave., Newton 58, Mass. The new elements can be used in place of previous elements for solutions not at atmospheric pressures. Viscosities of solutions under all pressures from 100 psi. to full vacuum can be measured.



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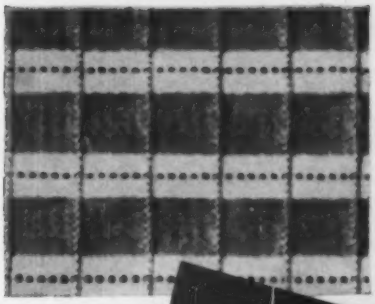
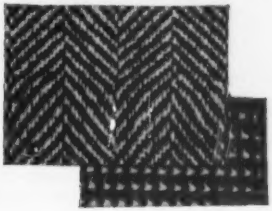
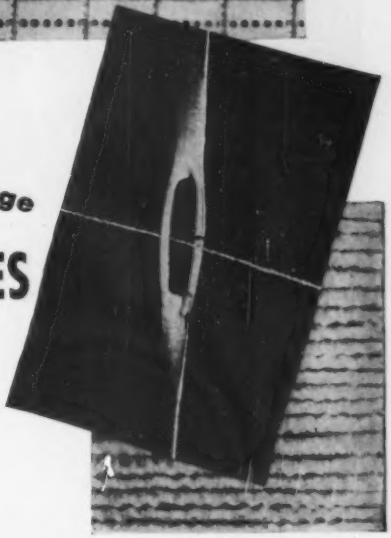


free chafless yarn flow—easy slub passage

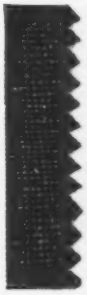
with WALKER Superior HEDDLES





The Walker "Streamlined Eye" for cotton and rayons and the famous Walker wool eye for wool and worsted yarns gives you improved cloth quality, longer service and lower cost. Walker makes a complete line of flat heddles including ⅛ turn, ½ turn and full open eyes.

While each of these is designed to fill your special requirements, these features are common to all:



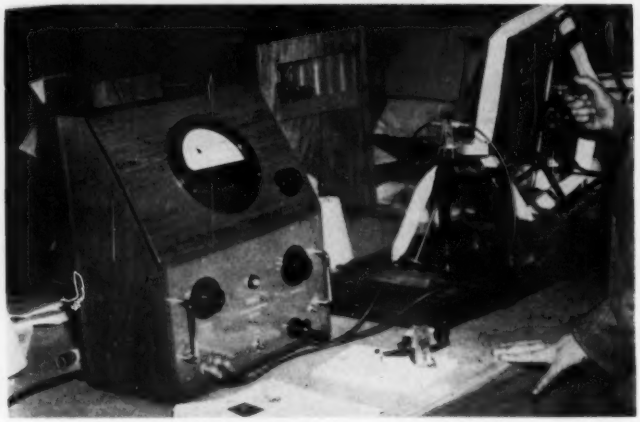
1. The warp eyes are cornerless at top and bottom—no oval or "V" shape—to give a broad flat base for warp travel.
2. The polishing of the eyes and shafts of all Walker Heddles is carried on to an unusual degree. Eyes are polished inside and out on machines especially designed for the purpose.
3. In addition to the customary quarter-turn of the heddle at the eye, the sides of Walker "Streamlined Eyes" are turned to a direction almost parallel to the warp ends. This gives additional highly polished surface rather than cut surface for warp to travel over, further reducing chafing and eye wear.
4. The streamlined shape of the Walker eye reduces yarn bumping to the very minimum as heddles come level and pass.

Write Walker, Dept. TW-3 today for your copy of the Walker Heddle Folder —describing in detail more of the advantages Walker Heddles give you.

WALKER
MANUFACTURING COMPANY, INC.
ATLANTIC & RUTH STS., PHILA. 34, PA.

HEDDLES • HEDDLE FRAMES • REEDS

New Regularity Device Can Be Used With Yarn Reel



THIS NEW METER continuously measures yarn regularity and indicates deviations from the average count.

A device that automatically and continuously weighs 1-cm. lengths of yarn, integrates the result, and presents the answer in terms of percent deviation of the whole was recently announced by Fielden Instrument Corp., 2920 N. 4th St., Philadelphia 33, Pa. The instrument, called the Mean Deviation Meter, does the job described above while the yarn is being reeled for the normal check of yarn number.

The new tester is based on the concept that yarn regularity is a most important factor in determining quality and grade. Up to now, estimation of this factor has been possible only by weighing unit lengths of yarn laboriously or by visual examination of wrappings on a black card.

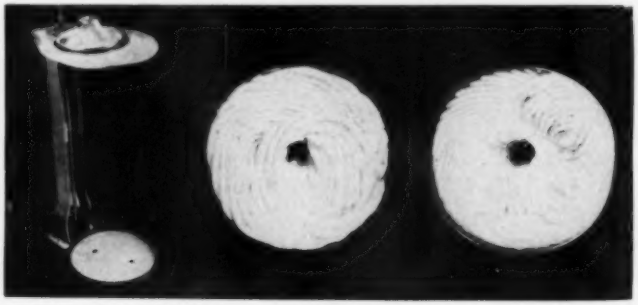
The equipment is in two parts—pick-up head and recorder. The pick-up head can be clamped to a yarn reel or spinning frame. The recorder comes in a hardwood case suitable for bench use and has a dial that registers from 0.50% irregularity of average yarn count.

How It Works—The deviation meter operates by making a continuous measurement of the dielectric mass of the yarn as it is passed through a specially designed condenser head. This method of yarn-thickness measurement is based on work done at the Manchester College of Technology in England.

The new instrument can also be used at the spinning frame to check yarn as it is spun. Different spindles can be quickly compared for product uniformity.

Faults in processing can also be traced with the unit when used with the yarn reel. When the yarn is passed through the pick-up head very slowly, with the modulation switched on and with zero integrating time, a reading proportional to mass is obtained. By noting the length of yarn between regular increases or decreases of mass, you can usually trace irregularities to some definite process.

Use Full Capacity of 14-in. Cans With This Unit



WHEN EXISTING TUBE GEARS are used with the conversion unit, you get the pattern on the left. When full can capacity can't be reached with present gears, the unit employs a smaller tube gear to get the pattern shown at the right.

Coiler-conversion units for adapting card and drawing-frame coilers to use 14-in. cans are now being made by Southern States Equipment Corp., Hampton, Ga. Conversion to the larger cans is said to give 36% more volume than a 12-in. can.

Special problems, occasioned by an inefficient coil pattern from a coil gear with limited throw, were licked by developing a new coil pattern. The new system uses a smaller tube gear and tube-gear speeds. Additional can capacity is fully used.

Unit Provides From 5 to 14 Zones of "Weather"

A completely new line of central-system "zoning" Weathermakers, designed especially to provide independent control of air conditioning in separate areas of a building through a single unit, has been announced by Carrier Corp., Syracuse, N. Y.

Five sizes are being produced with air-conditioning capacities ranging from 12 to 58 tons. The number of zones possible with the factory-built damper section varies from five for the smallest size to 14 for the largest. Intermediate sizes include 7- and 10-zone units.

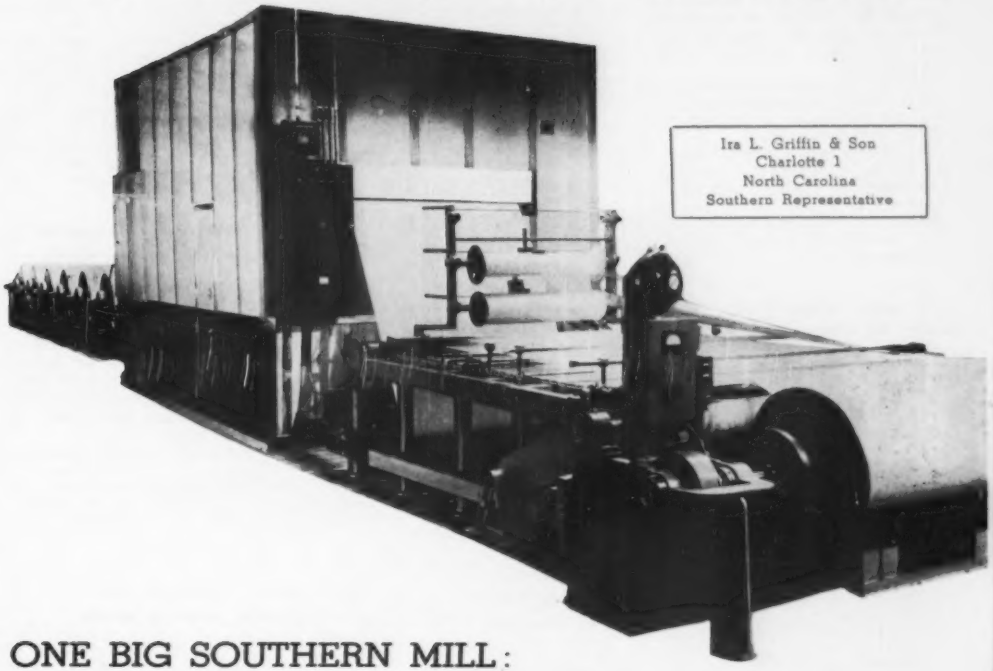
The units are designed for use in plants or office buildings where cooling or heating loads vary in different rooms or areas due to the changing position of the sun. In textile mills, start-up or shut-down of heat-producing power equipment in various parts of the plant or the need for different processing temperatures makes zoning equipment especially applicable.

(*Continued on page 260*)

More and More Mills are Turning to

Uxbridge Gentle-Air

for More Warps and Better Warps



Ira L. Griffin & Son
Charlotte 1
North Carolina
Southern Representative

ONE BIG SOUTHERN MILL:

- Drys 2430 ends of single 30's, at 105 yards per min.
- Drys 3950 ends of single 30's, at 85 yards per min.
- Uses only 15 to 20 pounds of steam pressure.
- Has replaced 8 can dryers with only 4 "Gentle-Airs"

BACHMANN UXBRIDGE WORSTED CORP.
UXBRIDGE, MASSACHUSETTS

More warps and Better warps

 For more information, write direct or use Reader Service post card.

NEW *Dyes* AND *Chemicals*

Industrial Detergent Improves Whiteness Retention

An industrial detergent that combines the advantages of both a detergent and a detergent promoter is announced by Wyandotte Chemicals Corp., Wyandotte, Mich. This new product, known as Kreelon CD, is an integral mixture that combines the advantages of Wyandotte's Kreelon, an alkylarylsulfonate-type detergent, and Carbose, a sodium carboxymethylcellulose.

This homogeneous product was developed to improve whiteness-retention properties and soil removal in scouring, kier boiling, after-soaping, etc.

The manufacturer states that Kreelon CD can be substituted for any other alkylarylsulfonate detergent and that it will give a 20 to 70% improvement in soil-removal and whiteness-retention properties. Kreelon CD is available in commercial quantities.

New Agent Scours Well Under All Water Conditions

A new non-ionic detergent and wetting agent, Cerfak N-115, is announced by E. F. Houghton & Co., Philadelphia, Pa. In this product, the manufacturer has combined several different types of non-ionics to yield a product said to have their combined virtues.

Cerfak N-115 is said to scour uniformly and well under all conditions of water, in alkaline as well as in neutral. This product is said to have been used in concentrations as low as 0.03% with satisfactory results. For example, oiled yarn that had an original oil content of 6.4% was scoured in a 0.03% solution of Cerfak N-115 and 0.1% solution of soda ash. Most of the oil was removed, and the extractable residue left was only 0.12%.

Although the primary object of this type of surface-active agent is its detergency, its wetting speed is said to be excellent. It can be used either as a straight wetting agent or a combination of wetting agent and detergent.

It can be used on cotton, rayon or other synthetics, and on woolen yarn. The manufacturer states that the sudsing properties can be controlled.

This product is a liquid, dissolves immediately in water at any temperature, and contains more than 90% active ingredients.

All-Purpose Cleaner Developed For All Surfaces

A new all-purpose cleaner, said to combine the advantages of an all-vegetable oil soap with those of a synthetic detergent and an alkaline polyphosphate water softener, is announced by West Disinfecting Co., Long Island City, New York. This cleaner was developed for efficient action in hard water as well as soft water, either hot or cold, and is said to produce good foam and detergency.

The new cleaner is designed for practically any cleaning operation, including scrubbing, mopping, and washing all types of floors, woodwork, painted walls, windows, and other comparable surfaces.

It is recommended by the manufacturer for use in relatively high dilutions. Some applications are said to require as little as one part of the cleaner to 45 parts of water. The product is claimed to be highly effective but harmless to floor surfaces when stronger concentrations are required. The manufacturer states that in hard water it can be diluted 10 to 1 without clouding or without loss of foaming or detergency properties.

Mildewproofing Agent Highly Effective

A highly effective mildewproofing agent, Interchem Copper-8-Quinolinolate, has been developed by Textile Colors Div., Interchemical Corp., Hawthorne, N. J. This new product is said to meet virtually all government specifications that call for the use of copper-8-quinolinolate.

It is said by the manufacturer to be available against DO-rated orders in water-dispersible and solvent-dispersible forms, as a concentrated dispersion in dioctyl phthalate, and in powder form.

Dyeing Assistant Name Changed

The name of the dyeing assistant recently developed by Amalgamated Chemical Corp., Rorer and Ontario Sts., Philadelphia 34, Pa., for dyeing polyester fiber has been changed to Dynadye.

This product, formerly known as Amidye, has been used on such fibers as Dacron, the polyester fiber produced by E. I. du Pont de Nemours & Co., Inc. The change in name has been made to avoid conflict with a product manufactured by other firms, the name of which is similar to Amidye.

Silica Treatment Improves Yarn and Fabric Strength

An increase in wear resistance of yarns and fabrics of from 3 to 30% is claimed for a new treatment developed by Joseph Hadju Institute, 9 Rue Ambroise-Thomas, Paris 9, France. Tensile strength is also said to be increased 5 to 20%.

The treatment consists of inserting ultra-microscopic particles of silica into the fiber. The particles are held in place by a plastic substance. The treatment is said to be permanent and insoluble.

The new process is claimed to increase resistance to wear during washing. New fabrics subjected to the treatment and boiled for 2 hr. in a soda solution showed no wear after 50,000 blows during a test at the Lyon Centre, it is claimed, while a similar untreated fabric broke at 15,036 blows. Other advantages claimed for the process are an improvement in heat-insulating characteristic, improved appearance and feel, the ability to impart any degree of waterproofing required, and additional resistance to dirt. It is further claimed that the treatment is unaffected by dry cleaning.

The process is covered by world patents and is available for use under license. It is claimed that it has been favorably commented on by various French textile laboratories, including the Conservatoire Nationale des Arts et Métiers, the Silk and Textile Industry Research Centre at Lyon, and the Industrial Analysis and Research Laboratory at Roubaix.

Scour and Bleach Compound Developed for Nylon, Rayon

A new scour and bleach compound, Scour Bleach No. 2, has been developed by Richmond Oil, Soap & Chemical Co., Inc., 1041-43 Frankford Ave., Philadelphia, Pa. This compound was designed for use on nylon and rayon. Scour Bleach No. 2 is said to give these fibers a mild bleach to get a clear bottom for pastel shades or for bright colors.

It is said to be particularly effective on both spun nylon and spun rayon. The bleaching action is reported to be quite mild but effective, and the scouring action is said to be as good as any scour normally used.

Starch Plasticizer and Softener Improve Sizing

Two new products for sizing of cotton warps have been developed by Zimmerman Associates, Box 248, Guilford College, N. C.

The first product, Glyozole (patent pending, trade mark registered), is a 100% active liquid that serves primarily as a starch plasticizer. The second product, Glyotal, is a 100% active solid that serves as a softener for the starch size. Both of these products are used in conjunction with starch in the sizing of cotton warp yarns. Both are said to have been thoroughly tested in the laboratory as well as in large sheeting mill in the South for a period of two years. These products have shown outstanding performance in weaving efficiency, decreased shedding, ease in removal of size during desizing operations, and ease in the adaptation of a formula for a given weave room, the manufacturer claims. They are very economical in cost, as well. Both products may be used with or without a starch homogenizer satisfactorily.

Ahead in... 1. DESIGN! 2. PERFORMANCE!

UNION SPECIAL'S
New
Sixty-One-Four
Union Special
SEE IT! TRY IT!
Find out what the new Class 61400 LOCKSTITCH can do for you! See your local Union Special representative, or write for full information.

● *It's a beauty!* Take a look at the "SIXTY-ONE-FOUR," Union Special's new LOCKSTITCH! Sparkling in appearance, it is equally outstanding in DESIGN and PERFORMANCE. For single needle, plain seaming operations, it offers these important advantages:

FAST ACCELERATION! Smooth, effortless operation—new, higher speed—faster starting and stopping to give you every production advantage. New cool-running needle bearings reduce rotary hook and cloth plate temperatures.

PERFECT, UNIFORM STITCHING! Smooth, flat seams even on curves. Positive, yet gentle, feeding action. No feed marks; no cutting.

SUPERIOR FOR TACKING, STAYING! Performance that can't be beat—thanks to superior, scientific thread control.

PLUS THESE IMPROVEMENTS! New neutral taupe finish—smooth, easy to clean. New stitch length indicator—visible, simple, accurate! *Style 61400 A* for light to medium work; *Style 61400 B* for medium to medium heavy work.

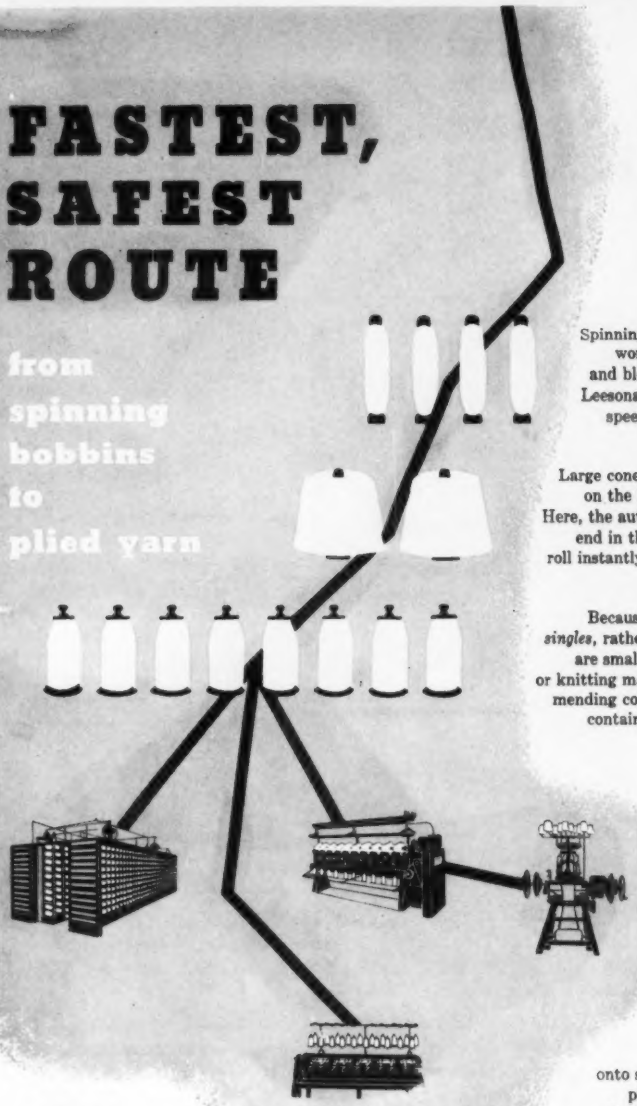
Union Special

World's Largest Exclusive Builder of Industrial Sewing Machines

MACHINE COMPANY 403 N. FRANKLIN ST. • CHICAGO 10, ILL.

FASTEST, SAFEST ROUTE

from spinning bobbins to plied yarn



Eliminates doubling . . . avoids costly delays

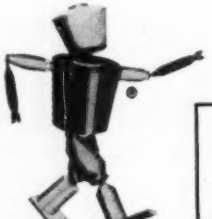
Spinning frame bobbins of cotton, worsted, spun rayon, spun nylon and blends are used as supply for the Leesona Roto-Coner* which winds at high speed and inspects the yarn *in the singles.*

Large cones are used as an *overend* supply on the Model 10 Ring Twister. Here, the automatic stop motion for each end in the ply stops the spindle and feed roll instantly when an end breaks or runs out.

Because ends have been tied *in the singles*, rather than in the ply, the knots are smaller, reduce stops at the loom or knitting machine, save burling and mending costs. Also, the twister package contains no drop ply.

Plied yarn from the large twister packages is wound on the Roto-Coner* onto sales yarn packages with minimum piecing-up . . . or can be used as a direct supply to filling winders or in warping creels.

23.1.9



Roto-Coner*
The Winder with the Rotary Traverse

*Reg. U. S. Pat. Off.

UNIVERSAL WINDING COMPANY

Atwood Division • P. O. Box 1605, Providence 1, R. I.

Boston, Philadelphia, Utica, Charlotte, Atlanta, Chicago, Los Angeles; Montreal, Hamilton; Manchester, England; Paris, France; Basle, Switzerland

Agents in every principal textile center throughout the world

Winding and Twisting Machinery for Natural and Synthetic Yarns

LEESONA ATWOOD

Model 10
Automatic Stop Motion for Each End and Ply

Textile Calendar

Alabama TQE, fall meeting, slashing and weaving, Alabama Polytechnic Institute, Auburn, Ala., Nov. 3, 1951.
STA, South Carolina Div., School of Textiles, Clemson, S. C., Nov. 3, 1951.
AATT, meeting, Builders Club, New York, Nov. 7, 1951.
Textile Research Institute, annual meeting, Hotel Statler, New York, Nov. 8 and 9, 1951.
AATCC, R. I. Sect., Johnson's Restaurant, Providence, R. I., Nov. 16, 1951.
Exposition of Chemical Industries, Grand Central Palace, New York, Nov. 26 to Dec. 1, 1951.
AATCC, Northern N. E. Sect., annual meeting, Boston, Mass., Nov. 30, 1951.
ARMI, annual meeting, opening and picking, Chalfonte-Haddon Hall, Atlantic City, N. J., Nov. 30, 1951.
AATCC, South Central Sect., Hotel Patten, Chattanooga, Tenn., Dec. 1, 1951.
AATT, meeting, Builders Club, New York, Dec. 5, 1951.
AATCC, Hudson-Mohawk Sect., Jack's Restaurant, Albany, N. Y., Dec. 7, 1951.
AATCC, Phila. Sect., Kugler's Restaurant, Philadelphia, Pa., Dec. 7, 1951.
School of Textiles, annual alumni technical conclave, N. C. State College, Raleigh, N. C., Dec. 7 and 8, 1951.
AATCC, Southeastern Sect., La Grange, Ga., Dec. 8, 1951.

1952

AATCC, New York Sect., Hotel New Yorker, New York, Jan. 11, 1952.
Plant Maintenance Show, Convention Hall, Philadelphia, Pa., Jan. 14 and 17, 1952.
AATCC, Phila. Sect., Kugler's Restaurant, Philadelphia, Pa., Jan. 18, 1952.
AATCC, Hudson-Mohawk Sect., Jack's Restaurant, Albany, N. Y., Feb. 1, 1952.
Cotton Research Clinic, National Cotton Council, Pinehurst, N. C., Feb. 13 to 15, 1952.
AATCC, New York Sect., Hotel McAlpin, New York, Feb. 29, 1952.
AATCC, Hudson-Mohawk Sect., Jack's Restaurant, Albany, N. Y., March 21, 1952.
Fiber Society, spring meeting, Clemson House, Clemson, S. C., April 16 and 17, 1952.
Cotton Mfrs. Assn. of Georgia, convention, Boca Raton Hotel and Club, Boca Raton, Fla., April 16 to 18, 1952.
Knitting & Allied Crafts Exposition, sponsored by Natl. Knitted Outerwear Assn. and Underwear Institute, Grand Central Palace, New York, April 21 to 25, 1952.
Natl. Knitted Outerwear Assn., annual convention, Waldorf-Astoria Hotel, New York, April 22 and 23, 1952.
Natl. Assn. of Hosiery Mfrs., annual convention and conference, Claridge Hotel, Atlantic City, N. J., April 28 and 29, 1952.
4th International Lighting Exposition and Conference, Cleveland Auditorium, Cleveland, Ohio, May 6 to 9, 1952.
ACMI, annual convention, Haddon Hall, Atlantic City, N. J., May 15 to 17, 1952.
Carolina Yarn Assn., annual outing, Carolina Hotel, Pinehurst, N. C., May 15 to 17, 1952.
American Society for Quality Control, annual convention, Onondaga County War Memorial, Syracuse, N. Y., May 22 to 24, 1952.
Textile Institute, annual conference, Assembly Hall, Edinburgh, Scotland, June 2 to 7, 1952.
STA, annual convention, Ocean Forest Hotel, Myrtle Beach, S. C., June 12 to 14, 1952.
ASTM, annual meeting, Hotel Statler, New York, June 23 to 27, 1952.
17th Southern Textile Exposition, Textile Hall, Greenville, S. C., Oct. 6 to 11, 1952.

1953

Knitting Arts Exhibition, Atlantic City Auditorium, Atlantic City, N. J., April 27 to May 1, 1953.

1954

American Textile Machinery Exhibition, sponsored by National Association of Textile Machinery Manufacturers, Atlantic City Auditorium, Atlantic City, N. J., April 26 to May 1, 1954.

EARLE MAULDIN

With deep regret we announce that Earle Mauldin, Southern Editor of TEXTILE WORLD, died October 10 in an automobile accident near Newnan, Ga. He was 65 years old.

Many will mourn the passing of Earle Mauldin, for Earle had countless friends all through the textile South as well as New York and New England. Gifted with a remarkable memory for names and faces and with a love for his fellow man, Earle enjoyed life fully and participated intimately in the rapid twentieth-century development of textile manufacturing as he traveled out of Greenville, S. C., and Atlanta, Ga.

Graduating from Furman University in Greenville soon after the turn of the century, Earle was successively connected with J. E. Sirrine Co. as an engineer (from 1907 to 1925); Welch, Mauldin & Sneed; and Park Mfg. Co. While with Sirrine, he was for 12 years manager of the Southern Textile Exposition held every two years at Greenville. Earle became Southern Editor of TEXTILE WORLD on Jan. 1, 1937, with headquarters in the Rhodes-Haverty Building, Atlanta.

He was a member of the Southern Textile Association, Illuminating Engineering Society, American Society of Mechanical Engineers, American Association of Textile Chemists & Colorists, and the Atlanta Textile Club. He was a past president of the Georgia Engineering Society.

Earle is survived by his wife, Elizabeth Martin Mauldin of Atlanta; a son, Earle, Jr., of Ware Shoals, S. C.; two daughters, Mrs. George W. Speer, Jr., of Greenville and Miss Harriet Mauldin of New York; three sisters: Mrs. W. E. Thayer of Asheville, N. C.; Mrs. W. H. Powe of Greenville; and Mrs. W. M. Wells of New Smyrna Beach, Fla.; and by a brother, R. M. Mauldin of Charlotte, N. C.

The entire staff of TEXTILE WORLD will sorely miss this revered member of its editorial family.

As this issue of TEXTILE WORLD goes to press, notice is received that Earle Mauldin's sister, Mrs. W. M. Wells, severely injured in the same accident, died at Newnan hospital.

LETTERS FROM OUR READERS

Address all communications to:

Editor, *Round Table*, TEXTILE WORLD
330 West 42nd Street, New York 18, N. Y.

Round Table

"CAN HAPPEN" EDITORIAL

Dear Editor:

Permit me to comment on your splendid editorial in the September issue. It is one of the most interesting editorials I have read in a textile publication for quite some time.

If any action is taken along the lines you suggest, be sure to give it some publicity. I would be very much interested in seeing such a program started and in reading about the facts that have been found.

In connection with the differences you mention between the South and the North, the following experiences of my own may be interesting to you.

On trips to the South I have had occasion to visit quite a few progressive mills. In a great number of these mills the management actively encourages employees to take an interest in their jobs and to take correspondence courses. In one ICS field division in the deep South there are 87 mills that refund to their employees part of their tuition when they complete a course.

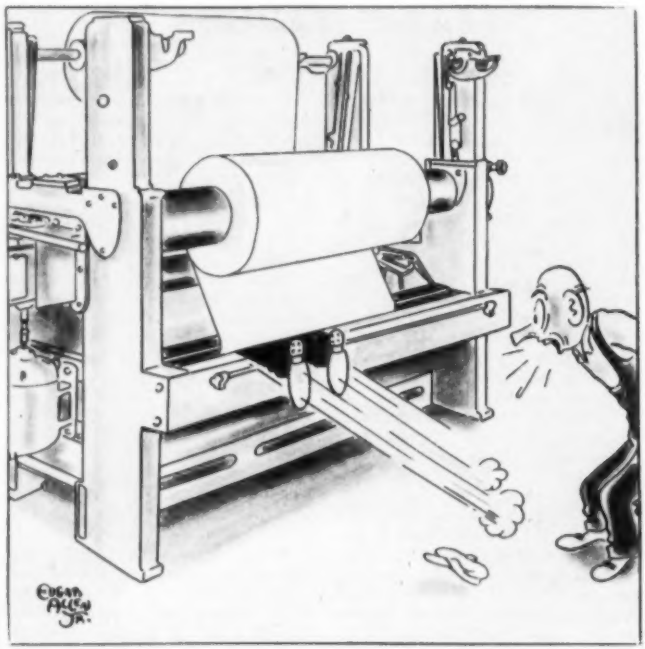
Needless to say, they favor these people in promotions and take an active interest in them.

In contrast with the Southern attitude, we have that of the North summarized in a survey made for ICS in New England several years ago. The situation may have improved a little, but fundamentally I believe it is still the same. In this report we read ". . . . In New England mills the dissemination of knowledge is discouraged by practically every overseer and superintendent."

All this seems to be quite in line with your editorial. I am looking forward to seeing the results of your fine spade work.

JOHN K. STEARNS
International Correspondence Schools
Scranton, Pa.

TEXTILE TICKLES . . . . . *By Edgar Allen, Jr.*



"Oh, let it go, MacTavish—after all, it was only a penny!"

EARLE MAULDIN FUN

[The following letter is one of the last received by the *Round Table* Editor from Earle Mauldin, late Southern Editor of TEXTILE WORLD, who died tragically last month. Its sense of humor is typical of that lovable gentleman who was a friend to all textile men.—EDITOR]

Dear Editor:

Bill Jones* and I both thought you ought to know about his delay in acknowledging the check. We had a good laugh. It all came about in this wise:

The check came to him in one of those envelopes with a window showing the name of the person addressed. It came to his home. He took one look at it, decided in his mind that it was a bit of promotion or something like that from the book company, or possibly a notice of expiration of one of his subscriptions, and threw it on his dresser intending to maybe look at it sometime.

Then when his wife handed him a glass of water to put on the table by his bed, he grabbed this envelope to use as a cover. It was used that way for a week or so.

One night he decided to open it before throwing it away, and pretty nearly jumped out of bed:

"Wake up all the children!" he shouted to his wife; "we're going to celebrate!"

So they pulled a big celebration on the strength of it, and I'll bet that cures Bill* of throwing away envelopes unopened.

EARLE MAULDIN
Atlanta, Ga.

* Fictitious name of an actual TW author

FLY-FRAME SPEEDS

Dear Editor:

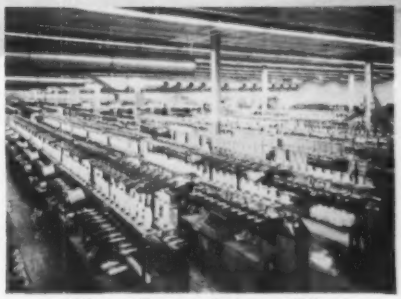
I have found that increasing the speed of a roving frame to a point higher than that for which the frame was designed always results in breakdowns and uneven roving.

I have seen many cases where a superintendent has forced a card-room overseer to increase the speed of his fly frames against his better judgment. What a mistake! When such is done, consider what happens to a frame with an English-type builder, for example.

With the proper rack gear for the hank being run, the gear moves the rack one-half tooth to smooth the hyperbola curve on the botton tension cone. Therefore,

Stonecutter Mills, Spindale, N. C., manufacturers of "Fabrics of Distinction"

What Makes a Mill Really Modern?



Spinning Room at Stonecutter Mills—Worthington centrifugal refrigeration supplies chilled water for air conditioning.

This is as modern-looking a mill as you've ever seen, isn't it?

It's Stonecutter Mills at Spindale, N. C.—a pioneer in weaving of quality dress fabrics of synthetic yarns.

Now look inside—in the Preparatory Department—which includes tinting, sizing, drying, twisting and other operations to prepare the yarn for weaving. You can see its modern equipment, floor to ceiling.

* * *

And if you were there, you'd get the idea of the modern *air control* — which provides the proper temperature and humidity conditions for the processing, and which also, by filtering the air, keeps the mill and the products "spick and span".

* * *

This modern mill uses the *most modern* air conditioning equipment—Worthington.

A 750-ton Worthington centrifugal refrigeration system furnishes chilled water for air-conditioning the Preparatory Department. And the offices are air-conditioned by six Worthington package air conditioners, providing a total of 80 tons of refrigeration.

This system, engineered and installed by the Bahnson Co. of Winston-Salem, N.C., who manufactured the air handling portion of the equipment, is typical of the preference for Worthington refrigeration for air conditioning throughout the textile industry. From the complete Worthington line, any mill can find the right refrigeration equipment for its air conditioning needs.

For *more worth in Worthington* write Worthington Pump and Machinery Corporation, Air Conditioning and Refrigeration Division, Harrison, N. J.

WORTHINGTON

24A3.45

AIR CONDITIONING AND REFRIGERATION

when you increase the frame speed, you increase the pressure on the paddle and need less of a slope on the bottom cone. So the rack gear gets out of time, as does the tension.

To remedy the tension, frame tenders will move the rack (commonly called "racking"). The best remedy is to have the proper curve on the bottom cone and to run frames at their rated speeds.

WILLIAM SHAW

Providence, R. I.

COMBED-YARN STRENGTH

Dear Editor:

A strength index for combed yarns has recently been developed by the Cotton Branch, Production and Marketing Administration, in the U. S. Dept. of Agriculture. The index is being reported for the first time this season to provide a means for comparing combed-yarn strengths (obtained in the testing of a specific sample) with the general average for carded cottons of the same staple length.

This index supplements the carded-yarn strength index already in use. Combed-strength figures are obtained in the same manner as carded-yarn figures except that different calculation standards are used.

Below you will find the average long-draft combed-yarn strength standards that are used as a basis for calculating combed-yarn-strength index numbers for specified staple lengths and yarn numbers:

Staple Length	Yarn Number 22s	50s	80s
1 1/32 in.	127.3 lb.	44.8 lb.	20.4 lb.
1 1/16	131.9	46.8	21.7
1 3/32	136.5	48.8	23.0
1 1/8	141.1	50.8	24.2
1 5/32	145.6	52.8	25.5
1 3/16	150.2	54.8	26.7
1 7/32	154.8	56.8	28.0
1 1/4	159.4	58.9	29.3
1 9/32	163.9	60.9	30.5
1 5/16	168.5	62.9	31.8
1 11/32	173.1	64.9	33.0
1 3/8	177.7	66.9	34.3
1 7/16	186.8	70.9	36.8
1 1/2	196.0	75.0	39.3
1 9/16	205.1	79.0	41.8

BUREAUCRAT

Washington, D. C.

WOOL-FABRIC STAINS

Dear Editor:

All finishers are faced with the problem of stain removal. How easy it is to have a large array of bottles of reagents for different types of stains! Within reason, however, the fewer the number of reagents, the easier it is for whoever is responsible for the removal of stains or for treating them in such a way that they will come out readily in scouring before finishing.

We have found one very useful solvent mixture to be made up as follows:

40% trichlorethylene
20% cyclohexanol
40% synthetic detergent

Any suitable synthetic detergent may be used. In Britain we have, for example, "Santomerse," "Teepol 530," and "Lissapol N," etc.

Such a mixture is most useful for oil stains, black grease, and several other types of stains. Even rust stains respond; though after scouring and tentering, a further treatment with oxalic acid is needed.

Sometimes the solvent-mixture formula is varied a little. The following is also effective, for example:

30% trichlorethylene
15% cyclohexanol
5% soap
40% turkey red oil
10% water

It would be interesting to hear what methods other dyers and finishers have adopted for stain removal before scouring.

FINISHER

Yorkshire, England

FOUR BUSINESS FREEDOMS

Dear Editor:

Our nation's continued high standard of living and its future improved social conditions depend on "four freedoms" for business enterprise. These freedoms include:

1. Opportunities for leaders to emerge from every segment of the population
2. Freedom of the market place
3. Freedom for starting new enterprises
4. Freedom of investment

These are a summary of the conclusions arrived at by Prof. Melvin Copeland, director of research at Harvard Business School, who has been studying the problems of American business since 1909.

These conclusions are discussed fully in a new book, written by Prof. Copeland and published this fall, entitled *The Executive at Work*. We thought quite a few of your readers might be interested in hearing about and perhaps reading the conclusions arrived at by one scholar after over 40 years of thought in the field.

CANTABRIGIAN

Boston, Mass.

TWO-SHUTTLE KINK

Dear Editor:

Thank you very much for the tear sheets describing the small gadget for preventing jerked-in filling [TW, Aug. '50, page 160].

This gadget looks very good for fabrics being woven with only two shuttles, but does not look like it could be used to any advantage for anything else.

F. K. PETREA

Concord, N. C.

Test Your TEXTILE IQ

▶ Each correct answer rates 10 points. A total of 70 is passing; 80, good; 90, excellent; 100—you're a genius! Keys to answers are on page 258.

1. In South Carolina during 1948, the average state property tax per spindle was:
   a. 48¢ c. $2.53
   b. $1.27 d. $3.76

2. The estimated production of non-cellulosic fibers in 1951 is:
   a. 576,000 lb. c. 246,000,000 lb.
   b. 165,000,000 lb. d. 738,000,000 lb.

3. A rayon fiber that can be crimped in finishing by a brief soaking in dilute caustic soda is known as:
   a. Fiber Z c. Fiber L
   b. Fiber C d. Fiber E

4. A new dye-winch cover is made of:
   a. Dacron c. acetate
   b. nylon d. Orlon

5. The Pneumafil central system:
   a. collects waste centrally c. requires more motors
   b. requires fewer motors d. increases ends down

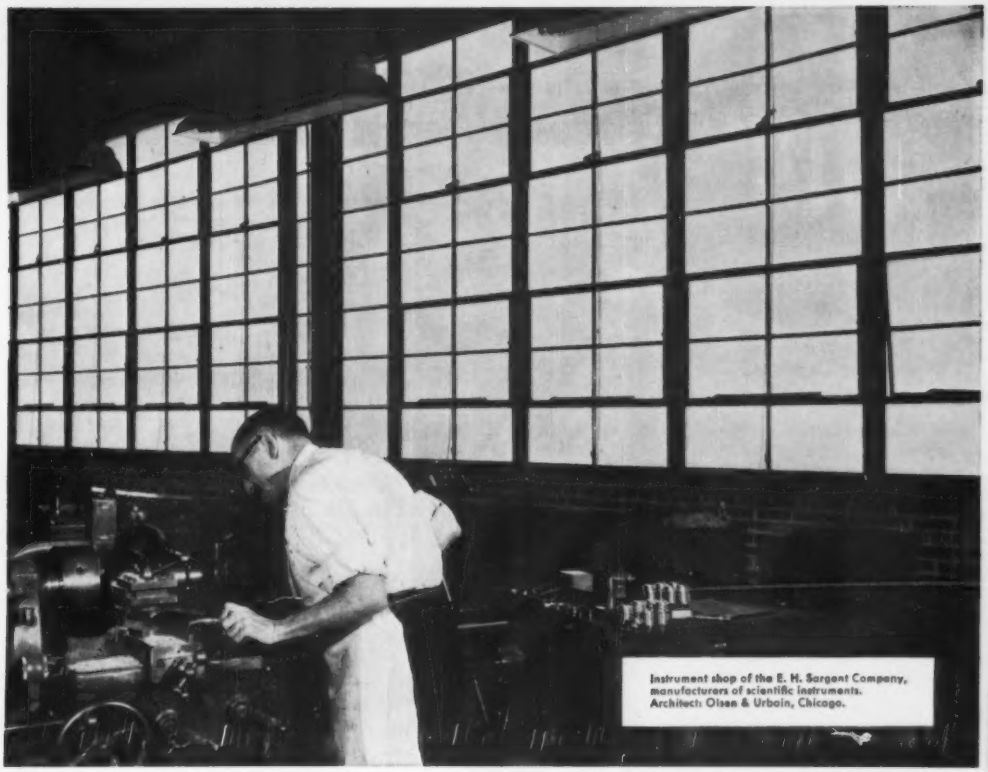
6. The new Richmond warp let-off motion:
   a. uses compressed air c. eliminates weights
   b. is hydraulic d. is a friction type

7. How does the textile industry rate in accident frequency as compared with 40 other industries?
   a. first c. thirtieth
   b. fourteenth d. forty-seventh

8. The original patent for long-draft spinning was granted in:
   a. England c. Italy
   b. Spain d. U.S.A.

9. In tricot knitting, short runner totals produce:
   a. less courses per inch c. more courses per inch
   b. more wales per inch d. less wales per inch

10. A moisture controller on a tenter frame will:
    a. cut production c. increase costs
    b. lower quality d. increase production



Instrument shop of the E. H. Sargent Company, manufacturers of scientific instruments. Architect: Olsen & Urbain, Chicago.

Work is easier, faster, safer with...

FILTERED DAYLIGHT

This machine operator could tell you what it does for him.

He'd tell you that the lighting in this room makes his work easier . . . helps him hit those close tolerances right on the nose. That his eyes don't get nearly as tired. He'd tell you that he stays cooler in summer, too.

The Blue Ridge Frosted *Aklo** Glass in those windows filters most of the glare out of sunlight . . . like sunglasses. Cuts sun heat as much as 44%.

BLUE RIDGE
***AKLO* GLASS**

You'll see blue-green Frosted *Aklo* in a lot of new plants that have geared up for top-speed production. Particularly on the south, east and west elevations.

Prove to yourself how it cuts down glare and sun heat. Ask your Libbey·Owens·Ford Glass Distributor for a Radiometer demonstration of its effectiveness . . . right on your desk. Or mail the coupon. *®

FREE BOOK on Reduction of Sun Glare and Heat

Blue Ridge Sales Div., Libbey·Owens·Ford Glass Co.
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☐ Please send me your book "Filtered Daylight".
☐ I would like to see a Radiometer demonstration.

Name _____ (please print)
Company _____
Address _____
City _____ State _____

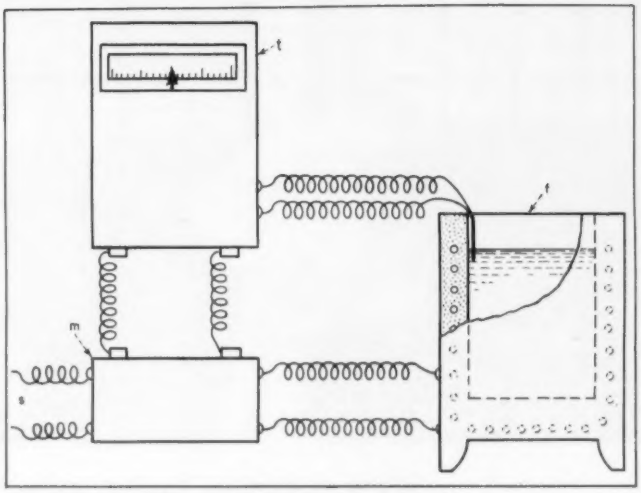
Kinks AND SHORT-CUTS

Thermostat Controls Temperature of Castings

A temperature of about 435° F. melts the lead, with tin and antimony added, that is used to cast tricot-knitting needles into a mold. If the temperature gets too high, the needles will become over-tempered. Excessive maintenance costs and wastes of needles will result.

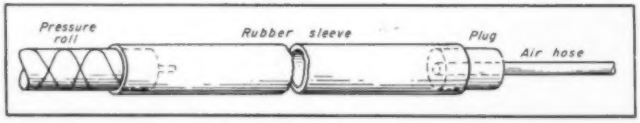
If the temperature is not high enough, the melted lead will not flow well thoughout the mold, and a bad casting will result. Here's how we maintain the proper temperature.

We use an electric furnace and thermostat as shown in the figure. The dial on the thermostat shows the temperature of the melted lead in the electric furnace. When we set the pointer at the proper temperature, the thermostat controls the magnetic switch and the temperature in the furnace is kept constant without any further attention. *Minoru Uno, Japan.*



AN ELECTRIC FURNACE, *f*, melts the lead, with some tin and antimony, that is used to cast tricot needles into a mold. The thermostat *t* keeps the temperature from getting so high that it will over-temper the needles. The magnetic switch *m* opens and closes the circuit from the electric source *s* to the furnace.

Here's How To Cover Pressure Rolls With Rubber Sleeves



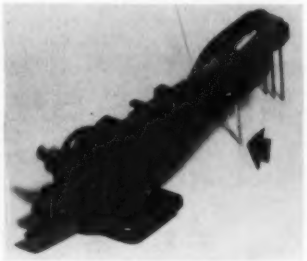
START ONE END of the sleeve on the roll and force air through the other end. You will need a plug of wood or metal to fit in the other end. The air hose fits in a hole in this plug.

Probably the best covering for the pressure roll of a silk-type loom take-up is a rubber sleeve. The rubber tubing is very hard to apply by ordinary methods.

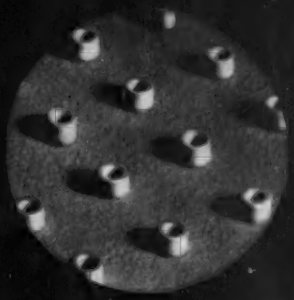
We made a wooden plug, with a hole in the middle, to fit one end of the rubber sleeve. We put the air hose into the hole in the plug. We start one end of the sleeve on the roll, slip the plug into the other end, and turn on the air. The air pressure expands the sleeve slightly and causes it to slip on easily. The compressed air should have a pressure of at least 30 psi.

The rubber tubing should be cut at least 6 in. longer than the area to be covered because expansion of the sleeve shortens its length. Spiral, double-threaded grooves, cut the entire length of the roll, will help hold the cover in place. We sometimes put glue or cement on the roll, but it is not necessary under normal conditions. *Wilmer Westbrook*

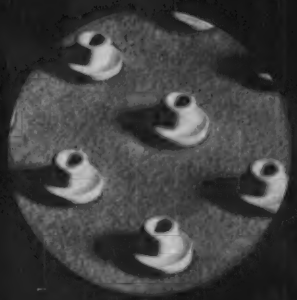
Protector Made for Side Filling Fork



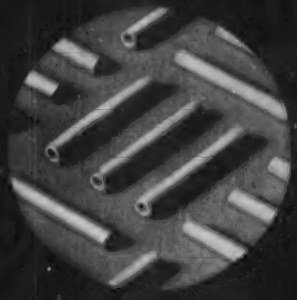
WHEN A SHUTTLE FLIES, the side filling fork on a Draper loom is usually damaged. I made the protector shown in the photograph to shield the filling fork from a flying shuttle. *Roberto Alderete, Chile*



TMW Part No. M-431
AlSiMag No. GE—24699



TMW Part No. M-433
AlSiMag No. GE—18281

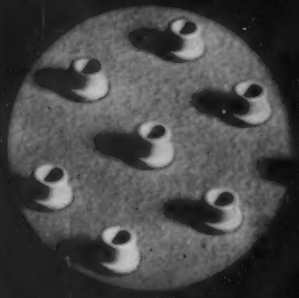


TMW Part No. M-499
AlSiMag No. GE—24700

TMW Part No. M-501
AlSiMag
No. GE—24701

AlSiMag® *Guides*

FOR "READING" FULL FASHIONED KNITTING MACHINES



TMW Part
No. M-502
AlSiMag
No. GE—24702

By actual experience, knitters know that AlSiMag Guides permit greater knitting speed and minimize broken filaments. On 60 gauge machines running fine denier yarns, economical production is possible only with guides of this type. Test these guides on your present machines. Samples on request. Let your own records prove that these guides do a better job, last longer and cost far less per pound of yarn processed.

These AlSiMag Guides may be ordered from Textile Machine Works, Reading, Pennsylvania, for immediate shipment from stock or from American Lava Corporation, Chattanooga 5, Tennessee, for shipment after normal production interval.

Guides shown approximately actual size and are standard sizes for "READING" Full Fashioned Knitting Machines

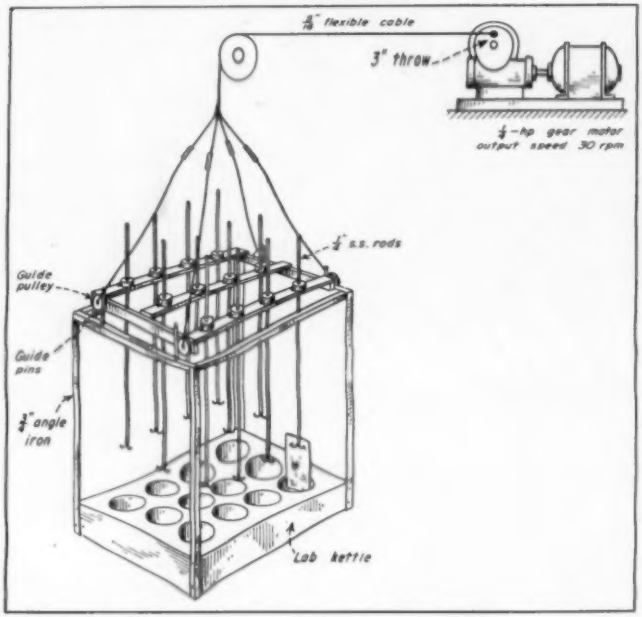
50TH YEAR OF CERAMIC LEADERSHIP

AMERICAN LAVA CORPORATION

CHATTANOOGA 5, TENNESSEE

OFFICES: METROPOLITAN AREA: 671 Broad St., Newark, N. J., Mitchell 2-8159 • CHICAGO, 228 North LaSalle St., Central 6-1721
PHILADELPHIA, 1649 North Broad St., Stevenson 4-2823 • LOS ANGELES, 232 South Hill St., Mutual 9076
NEW ENGLAND, 1374 Massachusetts Ave., Cambridge, Mass., Kirkland 7-4498 • ST. LOUIS, 1123 Washington Ave., Garfield 4959

Device Agitates Laboratory Dye Samples



THIS DEVICE can automatically agitate one or all 12 of our laboratory dye samples with little attention. The individual agitator rods can be taken out of operation at any time, and the agitating time for each specimen may be varied to suit the individual requirements.

Two or more attendants used to be required to agitate by hand specimens in the 12 laboratory dye kettles in our plant. We have devised an automatic agitator to do the job with little attention. The device will agitate from 1 to 12 specimens at the same time automatically.

Here's how the device is made. Twelve ¼-in. stainless-steel rods 24 in. long were slit for 1 in. at one end. The slitted ends were bent into a hook shape and were pointed to hold the samples securely. The upper ends of the rods passed through sliding fit collars that are fastened to the agitating frame. A threaded hole in each collar holds an adjusting thumb screw to position the rod properly or to hold it out of contact with the bowls when they are not in use.

The agitating frame is moved up and down by a motor drive. A crank pin on the motor shaft furnishes the drive to a 3/16-in. flexible cable. The cable goes over a pulley above the center of the agitating frame and is connected to four adjustable rods, which are fastened to each corner of the frame.

The ¼-hp. gear-reduction motor drives the crank pin at 30 rpm. The crank pin has a 3-in. throw.

One or more rods may be used at a time. The agitating time for each specimen may be varied to suit the individual requirements. When any specimen has been agitated sufficiently, the rod may be raised, held in position with the thumb screw, and the specimen may be removed. *J. S. Campbell, Manchester, N. H.*

"Glass House" One Answer to Employee Smoking Problem

SMOKING BOOTHS, constructed of sheet rock and plate glass, are placed at strategic points about a Southern cotton mill. The booth seats three people, has a fire extinguisher, an exhaust fan, and a smoking stand.

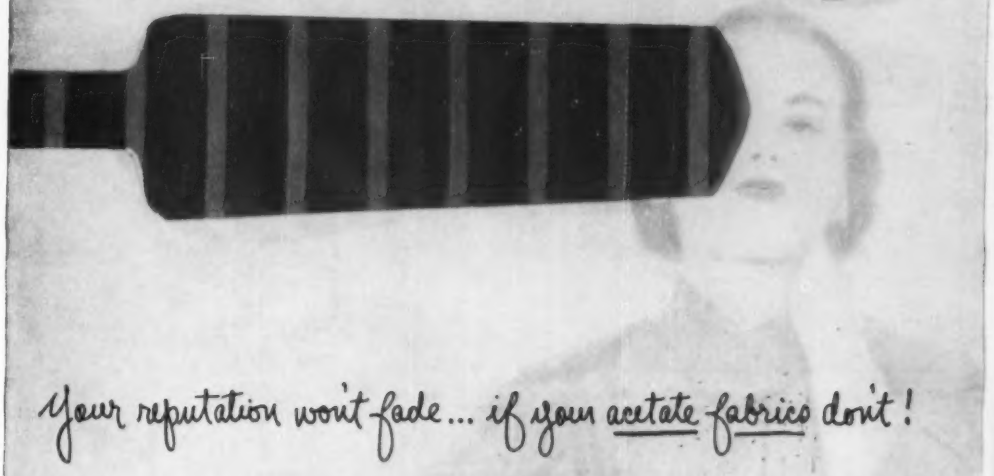
We have placed more than a dozen "glass house" smoking booths in our plant. Each booth has a bench that seats three people, which is the maximum permitted in each booth at any one time.

A small electric fan removes the smoke, and a fire extinguisher is mounted near the door. After over a year of operation, the fire extinguishers are still inactive—not a single fire has originated in the booths.

The main advantages of these smoking booths are:

1. Employees can observe their respective jobs while smoking.
2. Supervisors can see employees and better control abuses of the smoking privileges.
3. They relieve congestion of rest rooms and other former smoking areas.
4. They help eliminate sneak smoking in dangerous areas.
5. They improve employee morale.

*ARIPERM pm®



Your reputation won't fade... if your acetate fabrics don't!

***ARIPERM PM® Prevents Gas Fading**

When colors fade, so does consumer confidence in the manufacturer's label: this "backs up", eventually, to the dyehouse. There's no need for this with fabrics (partially or wholly) of ACETATE RAYON, for *they can be given protection against fading from atmospheric gases.* *ARIPERM P M does the job.* Its durability means exceptional protection through washing and dry cleaning.

ARIPERM P M is especially valuable for dyeing Light Shades, Pastels and Tints, since it does not throw the shade over to the yellow. Application is simple, in scouring or directly in the dyebath. Write for details, sample, demonstration.

Arkansas Co. INC.

MANUFACTURERS OF INDUSTRIAL CHEMICALS FOR OVER 45 YEARS
NEWARK, NEW JERSEY

Arkansas Co., Inc.
184 Foundry St.
Newark, N. J.

Gentlemen:

I would like to have, without obligation:

- ☐ full details of ARIPERM P M benefits
- ☐ sample and application procedure
- ☐ demonstration in plant

NAME _____ TITLE _____

FIRM NAME _____

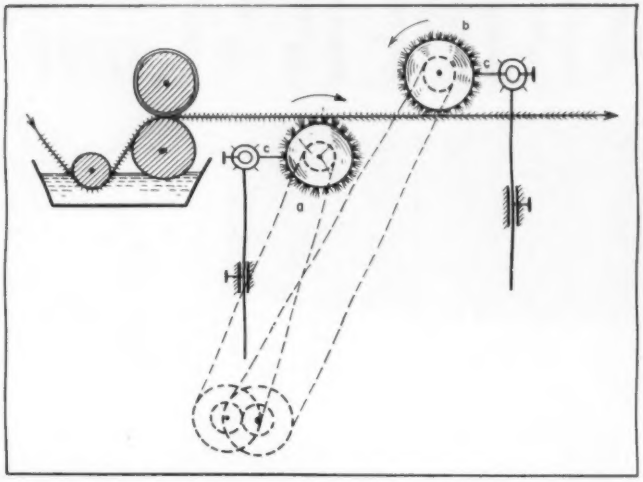
ADDRESS _____

CITY _____ STATE _____

2-7-1

Kinks AND SHORT-CUTS

Slasher Brushes Prevent Warp-Yarn Balling



CIRCULAR BRUSHES, *a* and *b*, help lay fibers down during slashing. The brushes have a higher surface speed than the warp, and they are cleaned by linear combs, *c*. The brushes are driven by chains.

We have increased the efficiency in our jute-weaving room by 4 to 5%. Most of our warp breakages were caused by warp yarns balling up in the heddles.

To reduce this balling up of the warp ends, we equipped our slasher with a pair of circular brushes mounted between the size box and the drying cylinders. The brushes rotate in the same direction as the warp does, and the surface speed of the brushes is higher than the speed at which the warp advances. The brushes are kept clean by two linear combs, which must be cleaned about every half hour.

The brushes cause the protruding fibers to be laid down and to be better fixed to the body of the yarn. The surface of the yarns becomes smoother.

When the warp is wound off the beam during weaving, the fibers tend to be pointed backward. Therefore, they cause very little friction at the heddles. *E. K. Deley, Belgium*

Don't Neglect Oiling Carriage-Weight Chains

The most neglected parts of a roving frame are the carriage-weight chains. If you examine old or damaged chains, you will find that the pins are badly worn. This wear is due primarily to the lack of lubrication. The pulleys are usually oiled regularly, but few men oil their chains.

To lubricate the chains properly, melt some good grease in a can and apply it to the chains with a small paint brush. The oiler should apply the lubricant to the chains at least once a week. *William Shaw, Providence, R. I.*

$200 for Best Kink in 1951
$25 for Best Kink Each Month

In Addition to Space Payment on Acceptance

You undoubtedly know of many kinks and short-cuts that are helpful to mill operators. Write them down and send them in. We pay promptly on acceptance—before publication. In addition, your kink may win the $200 check for the best kink of the year or the $25 check for the best kink of the month; maybe both!

Send in your kink now. There is always a contest going on. The more good kinks you send in, the better your chances of winning a prize in addition to earning some easy money for every kink accepted.

We will polish up your writing and will have an artist make finished drawings. But send in plenty of details so that your kink can be clearly explained. Be sure your sketch is clear and well labeled, but it need not be a polished job. Best of all, send us a good glossy photograph of it—we will pay you extra if you do and we can use it.

Look over the kinks in this and other issues. You will get ideas you can use as well as inspiration for kinks you can send in. We like items that pertain to ways for improving machines, new devices that a mill man can build, attachments or methods of merit—anything that will cut costs, improve quality, or help production.

Your published kink will be judged impartially by other mill men. In case of ties, duplicate prizes will be awarded.

RULES OF CONTEST

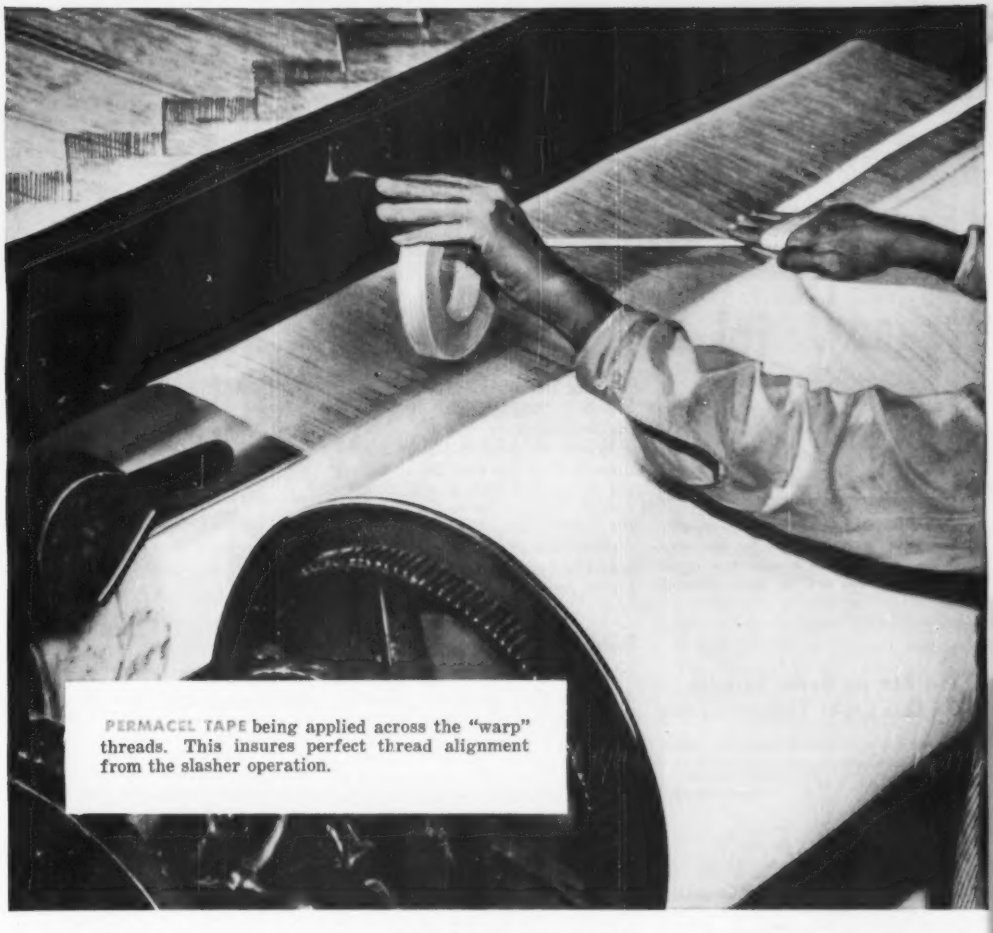
1. No limit to number of entries.
2. New $25 prize contest every month. $200 prize contest for the year. Monthly contest confined to kinks published that month, yearly to those published in calendar year 1951.
3. All kinks paid for on acceptance; extra payment for photographs. Drawings need not be finished (clear detailed pencil sketches will do).
4. Previously published material not eligible for prizes.
5. Unless you advise to contrary, we assume we may sign your name to kink when published.
6. Prize winners will be selected by readers, a different group each time. At least 200 will be asked to select preferred kinks in each issue. Their votes will select the best kink, and their decision will be final.

Send kinks to whichever address you prefer:

TECHNICAL EDITOR, TEXTILE WORLD
330 W. 42nd St., New York 18, N. Y.

SOUTHERN EDITOR, TEXTILE WORLD
2385-A Lindmont Circle, N. E., Atlanta, Ga.

NEW ENGLAND EDITOR, TEXTILE WORLD
P. O. Box 305, Salem, Mass.



PERMACEL TAPE being applied across the "warp" threads. This insures perfect thread alignment from the slasher operation.

Save 3 to 6 Yards of Warp

on every beam with Permacel Tape

There's extra profit in every beam when you use new timesaving, waste-reducing **PERMACEL**. First, you save from 3 to 6 yards of warp on each beam. And more important, you save valuable time by using fast-applying **PERMACEL** to hold the warp ends firmly and accurately.

MONEYSAVING IDEAS FOR WASTE CONTROL PROGRAMS

Our tape specialists can give you hundreds of shop-tested answers to your waste control problems. No matter how large or small the job, please feel free to write: Dept. 14-N

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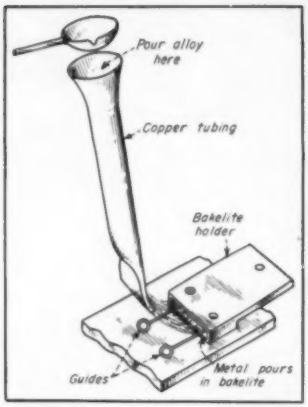
INDUSTRIAL TAPE CORPORATION, NEW BRUNSWICK, N. J.

Makers of ® TEXCEL Cellophane Tape, and a complete line of pressure-sensitive tapes for industry.

Here's How We Pour Metal for Guide Moldings



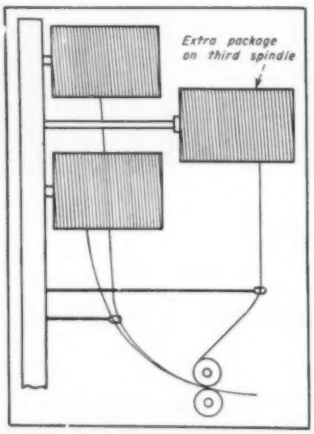
THIS FUNNEL helps us get better penetration when we mold guides for our warp-knitting machines. It is made from copper tubing 1 ft. long and 1½ in. in diameter.

Until we made this copper-tubing funnel, we had trouble in getting even penetration of the melted alloy between the guides and the bakelite opening. Often it would not penetrate through the rivet holes in the bakelite holder. As a result, our individual guides would tend to loosen prematurely.

The funnel is made from a piece of copper tubing 1 ft. long and about 1½ in. in diameter. We enlarged the top of the tubing to facilitate the pouring of the molten alloy, and we flattened the other end of the tubing into a rectangular shape the size of the mold opening.

When we pour the molten alloy through the tube into the mold, we get better distribution and penetration of the alloy because it falls from the 1-ft. height. We insert the individual guides and the bakelite holder in the mold as usual. *Lawrence Prelog, Australia*

We Put an Extra Spindle On Our Light Twister Creels



EXTRA SPINDLES were needed on our light twister creels to run three-ply yarns. There wasn't enough room on the creel to put an extra package in without making special spindles. Here's what we did.

We cut lengths of ½-in. iron rod long enough so that we could turn down the end of it to ⅛ in. The spindle was made so that the extra package extends out in front of the regular packages. Therefore we have our extra spindles that we need, and at the same time we can see easily every end in the creel. ***Troy Phelps, Rocky Mount, N. C.***

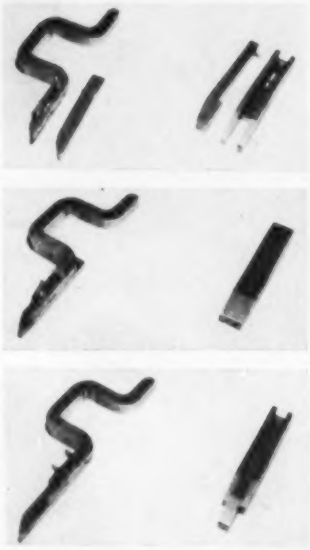
Bobbin-Cleaning Week

Much oily roving and yarn are caused by flakes of dried oil from inside bobbins. The flakes often are pushed out of the bobbin when a skewer is put in the bobbin at creel time. If a flake falls on the taper of the bobbin, it may be drawn into the rolls when the roving runs down.

The best way I've found to prevent oily roving and yarn from this cause is to keep the bobbins cleaned out.

We have a bobbin-cleaning week. Once a month, the frame tenders and doffers are given round wire brushes. Holding a bobbin in one hand, they push the brush into the bobbin barrel. A surprising amount of foreign matter usually comes out of a bobbin that has been in use a month. *Wm. Shaw, Providence, R. I.*

We Use an Adjustable Gauge To Set Draper Looms



THESE ADJUSTABLE LOOM GAUGES are made of steel. We use them to set the timing of the pick and the length of crank arms on all types of Draper looms. In the top picture, the gauges are shown disassembled; in the middle picture, the gauges are at their shortest length; and in the bottom picture, the gauges are shown extended.

On different types of Draper looms, the distances that are normally gauged vary. We made these adjustable gauges so that we can use one gauge on all types of Draper looms.

The gauges are used in the usual way to set the timing of the pick and to set the length of the crank arms. *Roberto Alderete, Chile*

Best-Kink Award for September

Each month TEXTILE WORLD awards $25 to the submitter of the kink judged by a panel of over 200 practical mill men as the best for that particular month. A new batch of kinks appears each month, and a new group of readers acts as judges each month.

If you are asked to judge one of these days, be sure to help select the best kink by sending back your answer in time for final tabulation. Closing date for judging is the last day of the month in which the kink appears.

The best kink for September, according to TEXTILE WORLD reader-judges, was:

"Device Designed To Eliminate Jerked-In Filling"

By Grady Parham
Louisville, Ky.

Mr. Parham is being sent check for $25 with the compliments of TEXTILE WORLD.

Rayon Reports

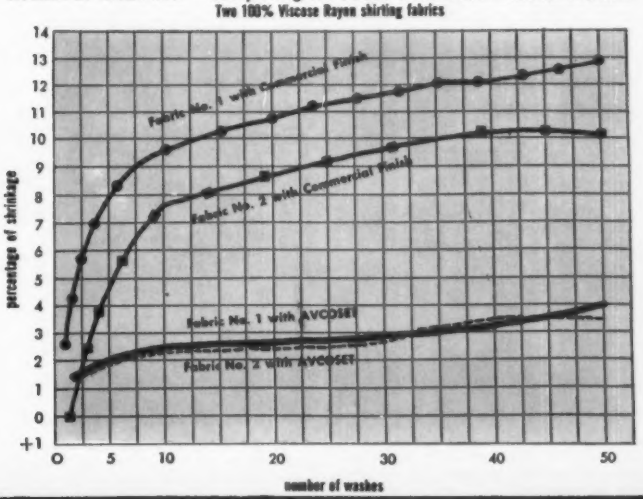
Prepared Monthly by American Viscose Corporation, New York, N. Y. November, 1951

Industry-Wide Interest Reported for Avcoset*

NEW STABILIZING PROCESS ACHIEVES SHRINKAGE CONTROL FOR RAYON

The recent Avisco announcement of the achievement of permanent shrinkage control for rayon has produced an extremely favorable reaction in the field. The news that Avcoset eliminates progressive shrinkage through 50 washings has caused particularly enthusiastic comment—as has the lack of chlorine retention and subsequent immunity to bleaching agents.

Results of Wash Test—Comparing AVCOSET with a Commercial Process
Two 100% Viscose Rayon shirting fabrics



It is emphasized that Avcoset is a cellulose finish for a cellulose fiber. Intended primarily for shirting weight fabrics, the new process affects only viscose. However, it can be successfully applied to fabrics combining rayon with percentages of nylon, acetate or other fibers.

The new process is the result of more than two years' laboratory evaluation by Avisco's Textile Research Department. It has already been utilized on a commercial scale—and is ready for adoption by all those in the industry alert to improving rayon textiles. Inquiries about the Avcoset process are welcomed. Address: American Viscose Corporation, Converting Relations Department, 350 Fifth Avenue, New York 1, N. Y.

*Reg. Trade Mark

RAYON 20 YEARS AGO

NEW YORK, N.Y., November, 1931—More than 68,000 yards of rayon fabric were used in decorating the newly-opened Waldorf-Astoria.

CALCUTTA, INDIA, November, 1931—Rayon imports into India have greatly increased in the past few months.

NEW YORK, N.Y., November, 1931—The National Retail Dry Goods Association has passed a resolution protesting the weighting of rayon fabrics.

MAKE USE OF *Avisco*® 4-PLY SERVICE

To encourage continued improvement in rayon fabrics, American Viscose Corporation conducts research and offers technical service in these fields:

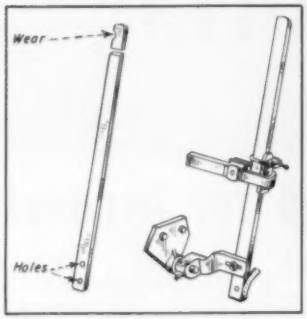
1 FIBER RESEARCH
2 FABRIC DESIGN
3 FABRIC PRODUCTION
4 FABRIC FINISHING

AMERICAN VISCOSE CORPORATION

America's largest producer of rayon

Sales Offices: 350 Fifth Avenue, New York 1, N. Y.; Charlotte, N. C.; Cleveland, Ohio; Philadelphia, Pa.; Providence, R. I.

I Get Extra Wear From Two-Position Picker Sticks

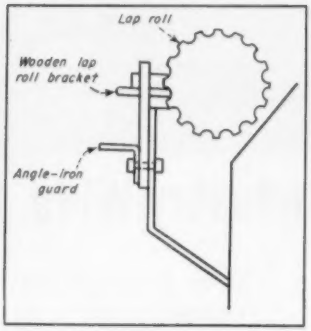


PICKER STICKS on the box ends of C&K looms usually wear at the top because of the floating pickers. I made these picker sticks slightly longer than the standard length and bored two holes in the butt of the stick. First, I use the top hole; and when the top of the stick starts to wear, I change to the bottom hole. In this way, I get double the normal life from my picker sticks. *Roberto Alderete, Chile*

Magnetic Separator Used on Waste Conveyor

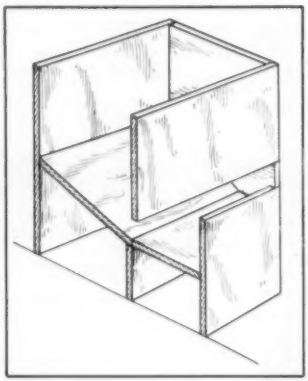
A MAGNETIC SEPARATOR is used by The Appleton Co., Anderson, S. C., on a waste-cotton conveyor line as protection from fire and machinery damage. The Eriez Giant plate-type separator is designed to prevent bolts, nails, clips, and other ferrous impurities in waste from striking a spark and causing a fire. The installation on the waste cotton conveyor line has worked out very well at Appleton. They have not had any fires in the waste machine since its installation.

Angle-Iron Guard Protects Back of Card



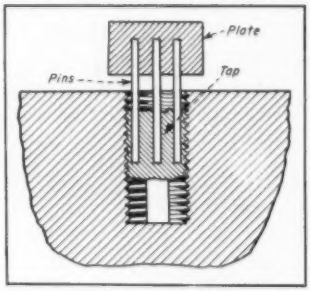
OUR NARROW CARD ALLEYS used to cause damage to trucks, laps, and the cards themselves. We have reduced this damage by putting a guard rail on the back of each card. The guard is a piece of 1½-in. angle iron, rounded at the corners, and bolted through the wood lap-roll bracket onto the flange of the card-side.

Here a New Bobbin-Box Design



THIS BOBBIN-STORAGE BOX facilitates emptying of the box and prevents some damage to bobbins. The box has an inclined bottom at an inclination of 3 to 1. The front of the box is raised 9 in. from the table, which is located at the front. The table is about 11 in. wide and 17 in. from the floor. As the bobbins are poured into the box, they slide on the inclined bottom beneath the front side, and they are easily taken off the table. *Francisco Pless, Mexico*

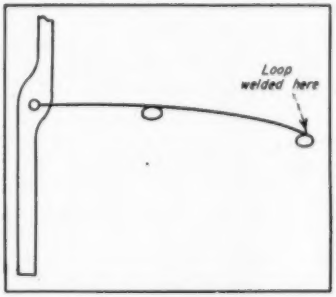
Here's How I Remove Broken Taps



MY DEVICE to remove broken taps consists of three steel pins fixed in a steel plate. Both the pins and the plate are hardened and magnetized.

I drive the pins into the flutes of the taps by hammering on the plate. Then I turn the plate with a pair of pliers to screw the tap out. *W. E. Warner, England*

Double Loop Used in Rewinding



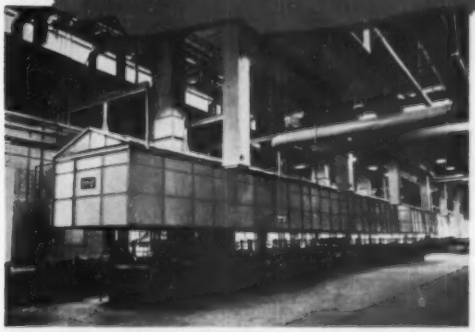
WHEN WE REWIND on our Abbott winders from tubes we use a guide that has a double loop. The extra loop gives us enough tension for a firm package, and it prevents too much ballooning.

Before we added the extra loop, we had trouble with improper tension on the package. *C. S. Strickland, Rocky Mount, N. C.*

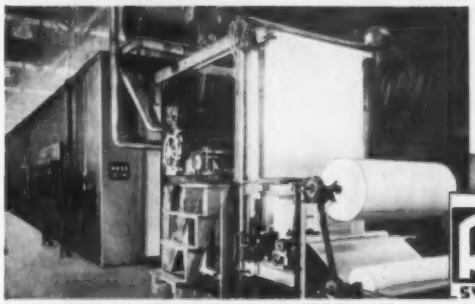
We Use Chain On Abbott Winder Elevators

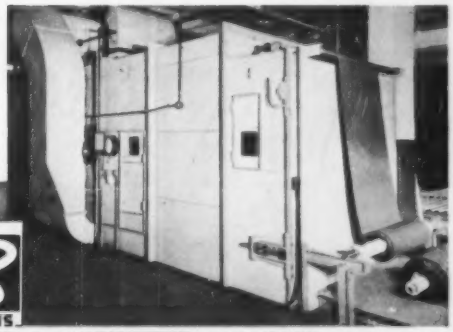
The cable on the elevators of our Abbott winders used to cause trouble when it became worn. It would snag operators' hands and catch a lot of lint. We replaced the cable with chain and find that it lasts much longer. *C. S. Strickland, Rocky Mount, N. C.*

Here's how the industry uses CONTROLLED AIR for heating, drying, cooling, ventilating



Each new installation of the modern ROSS Air Systems throughout the textile industry further testifies to their effectiveness in achieving greater production efficiency and operating economies. They are fast becoming standard equipment for confining and removing vapors to speed drying, to prevent spoilage from condensation, to eliminate fog, to provide comfortably cooled working areas and similar requirements. ROSS engineers, with the longest experience in handling air problems, will gladly survey your requirements. Investigate the possibilities for your plant.





ROSS SYSTEMS

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1200 WOODSIDE BUILDING
GREENVILLE, SOUTH CAROLINA
Charles C. Switzer, Manager

THE KEEVER STARCH CO. ★ GENERAL OFFICES ★ COLUMBUS 15, OHIO

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New Dyes & Chemicals
New Useful Accessories
Editorial Articles
and the Advertisements

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TRADE LITERATURE Number: F1 F2 F3 F4 F5 F6 F7 F8 F9 F10 F11 F12 F13 F14 F15 F16 F17 F18 F19 F20 F21 F22 F23 F24 F25 F26 F27 F28 F29 F30 F31 F32 F33 F34 F35 F36 F37 F38 F39 F40 F41 F42 F43 F44 F45 F46 F47 F48 F49 F50 F51 F52 F53 F54 F55 F56 F57

NEW USEFUL ACCESSORIES Number: U1 U2 U3 U4 U5 U6 U7 U8 U9 U10 U11 U12 U13 U14 U15 U16 U17 U18 U19 U20 U21 U22 U23 U24 U25 U26 U27 U28 U29 U30 U31 U32

NEW EQUIPMENT on page (give page number and identifying letter which can be obtained from the table of contents on page 3) .....

.....

ADDITIONAL INFORMATION ABOUT THE ADVERTISEMENTS ON PAGES: .....

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Outstanding TRADE LITERATURE

Free for the Asking

NO REPEATS . . . Listed here for November are current bulletins reviewed by the editors of TEXTILE WORLD.

To get the ones you need, circle the number on the Reader-Service card, as described on the preceding page.

TEXTILE MACHINERY

Centrifugal (pot) spinning of worsted yarns is described in a bulletin available from Atkinson, Haserick & Co. The Prince-Smith & Stells frame described is in operation in several British mills and is said to show great promise in savings attainable. **(F-1)**

A modern infant's Kemet links-and-links knitting machine is the subject of a catalog released by Scott & Williams, Inc. The machine also knits broad-ribbed hosiery. One completely automatic operation replaces two machines formerly required. **(F-2)**

Steam setting and hot-air drying of hosiery is described in a bulletin made available by Paramount Textile Machinery Co. A side-center groove on their Duomold-24 machine is said to prevent rippling and lopsided seams. **(F-3)**

Continuous automatic processing equipment—for the application of external coverings to continuous-web materials—is described in a bulletin issued by Industrial Ovens, Inc. First the coating devices, then the dryers are thoroughly presented and discussed. **(F-4)**

A new-model cloth inspector that can be tailored to your job and your budget is described in a folder published by Sykes Foundry & Machine Co., Inc. Five machines are shown. **(F-5)**

"Cloth Room Practices," a book so good that it is being used as a textile-school text, has been made available by Curtis & Marble Machine Co. The book, first ever written on this subject, contains a wealth of valuable information. **(F-6)**

A new large-package woolen ring-spinning frame is the lead item in the latest issue of Platt's *Bulletin*. There is also a feature on woolen blending-room equipment. **(F-7)**

Measuring and examining equipment in use at Hess, Goldsmith & Co., Inc., is discussed in a folder published by Hermas Machine Co. Machines with back lighting are used. **(F-8)**

Knitters should write for a technical tip on repairing inserted wall cylinders. The information has been made available by Scott & Williams, Inc. Five steps show how broken walls are replaced. **(F-9)**

The new-type condenser for woolen cards is thoroughly described in a catalog issued by Platt Bros. (Sales) Ltd. Nine types of rubbing leathers, and many methods of threading are shown. **(F-10)**

AUXILIARY EQUIPMENT

Color-Eye, the color device that makes a comparison in 30 sec., is described in a folder issued by Instrument Development Laboratories, Inc. The device is designed to help dyers do their job more efficiently and to take guess work out of color matching. **(F-11)**

Three pH booklets have been prepared by Macbeth Corp. Continuous-indicating, line-operated models, explosion-proof units, and titration pH meters are pictured and described in the booklets. **(F-12)**

People work better when they see better, according to a folder put out by Edroy Products Co. Their binocular eye-loop is used in hosiery mills, laboratories, and wherever precision work is required. **(F-13)**

Electric motors of the large end-shield bearing, squirrel-cage, induction type are described in a bulletin released by Allis-Chalmers. The motors are available in ratings and speeds up to 1,750 hp. at 1,800 rpm. **(F-14)**

Chain-drive selection is assisted by a bulletin issued by Whitney Chain Co. The booklet tells how to determine interchangeability of various makes of roller and conveyor chains. **(F-15)**

pH measurement and control is the subject of a bulletin prepared by The Bristol Co. Complete information is given on all their equipment, including the electronic Dynamaster strip-chart instrument. **(F-16)**

A complete new handbook of electric brakes and clutches for industrial use has been published by Warner Electric Brake & Clutch Co. Unit sizes, mounting dimensions, and engineering-performance specifications are included with general information on the products. **(F-17)**

The differential converter—for pneumatic transmission of flow or differential-pressure measurements—is described in a catalog issued by Minneapolis-Honeywell Regulator Co. The unit is a mercuryless type of manometer. **(F-18)**

The electronic integrator for the Uster tester is described in a flyer from Uster Corp. A companion folder describes the new-model tester, which has speeds from 2 to 100 yd. per min. **(F-19)**

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New York 18, N. Y.

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Reader Service (Continued)

The Color Densitometer—an electronic photometer of the direct-reading type—is described in a bulletin issued by Macbeth Instrument Corp. Accessory equipment allows measurement of opaque samples and liquids with the unit. **(F-20)**

Another precision instrument, the Beckman pH meter, is described in a flyer made available by National Technical Laboratories. The portable device has only four controls and is battery-operated. **(F-21)**

SUPPLIES AND CHEMICALS

Fungicides for the textile industry are included in a comprehensive catalog prepared by Ferro Chemical Corp. Of particular interest is a line of solubilized copper quinolates in the CQ series. **(F-22)**

"Hydrogen Peroxide in the Manufacture of Viscose" is the title of a bulletin published by Buffalo Electro-Chemical Co. The bulletin tells how viscose rayon is made and how hydrogen peroxide helps the process. **(F-23)**

Fast handling of orders is the keynote of a new Washington plant of Fisher Scientific Co., according to a booklet recently released. The company sells laboratory appliances and equipment. **(F-24)**

A detergent data file has been made available to TW readers by Dexter Chemical Corp. A complete series of bulletins is offered to fill the file. **(F-25)**

A colloidal solution of hydrated silica in water—Syton C-30—is described in literature prepared by Monsanto Chemical Co. The product is used for emulsion-type waxes, water-based finishes, and as a gloss-controlling compound. **(F-26)**

Twister bobbins and spools take up most of the space in a large catalog prepared by Lestershire Spool & Mfg. Co. Many types of specialized bobbins are shown to illustrate the company's ability to fill mill needs. **(F-27)**

Care and maintenance of industrial trucks is the subject of a manual published by The Baker-Raulang Co. Fifty-one illustrations show the steps to be taken in preventive maintenance and annual check-ups. **(F-28)**

ENGINEERING AND MAINTENANCE

Water heating by steam injection is described in a bulletin issued by Pick Mfg. Co. *No storage tanks are needed with the system,* and no coils are involved. The design is compact, and water is heated instantly. **(F-29)**

Know how to get electric power for mill expansion—on time and at low cost, with a minimum of critical materials? If not, you may be interested in a bulletin prepared by General Electric Co. Use of packaged systems is the answer. **(F-30)**

A steam-trap selector has been prepared by Yarnall-Waring Co. The booklet is a supplement to a previously issued steam-trap catalog and contains data for textile dryers. **(F-31)**

A battery charger of the four-circuit, motor-generator type is described in a folder published by The Electric Products Co. The unit is fully automatic, compact, self-contained, and takes only 8 to 9 hr. for a complete recharge. **(F-32)**

Reports from an electrical testing laboratory present a catalog of fluorescent light fixtures prepared by Gibson Mfg. Co. The company's complete line is shown, and price lists are included. **(F-33)**

Concrete, wood, or steel floors can be resurfaced with Plastic Rock, according to a bulletin published by United Laboratories, Inc. Three sizes of the particles are available. Your own maintenance crew can do the job. **(F-34)**

Foamglas insulation for piping and process equipment is described in a booklet issued by Pittsburgh Corning Corp. Tables show sizes and shapes of the ma-

MODERN HUMIDIFICATION

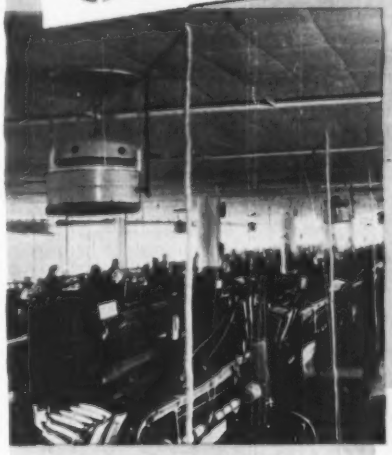
by Walton

-approved for 3-WAY SERVICE!

OK FOR SPOT HUMIDIFICATION

OK FOR BOOSTER HUMIDIFICATION

OK FOR COMPLETE HUMIDIFICATION



Modern Walton Humidification Systems combine economical simplicity with top operating performance. No costly compressors or duct work are employed. Single booster or complete automatic system, Walton remains trouble-free, dependable and requires practically no maintenance. When plant layout changes occur, Walton installations can be easily relocated, as the only connections necessary are ordinary water supply and simple electrical wiring.

NEW TEXTILE CATALOGS AVAILABLE NOW!

"Humidification for the Textile Industry" and "The Importance of Humidification in the Knitting Industry." — Send for your copies, today! — Address Dept. 13.

WALTON LABORATORIES
INCORPORATED
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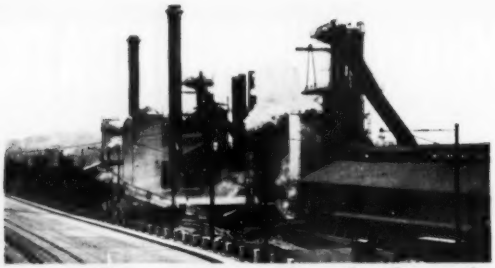
SPECIALISTS IN INDUSTRIAL, COMMERCIAL AND RESIDENTIAL CONTROLLED HUMIDIFICATION



More Coke..More Coal Chemicals and soon More Pig Iron

for Southeastern Industries Served from Birmingham by

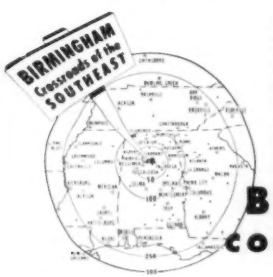
SLOSS-SHEFFIELD STEEL & IRON COMPANY

Big expansion programs involving expenditure of many millions are the order of the day with the Birmingham district's major industries that serve the Southeast. Mainspring of these large-scale developments is the burgeoning prosperity and accelerating progress of the surrounding Southeastern market area.

In the words of Claude S. Lawson, president of Sloss-Sheffield Steel & Iron Company, which recently announced extensive plant additions and improvements:

"The Southeast's economic progress this past decade has been dynamic. Industries that serve the Southeast from the centrally situated Birmingham district have been levered by this progress into large expansion programs. Take our own Company, for instance. So rapidly has the demand for iron increased in the Southeastern trade area that we are making the largest investment in new facilities in our Company's recent history. We are building a new battery of coke ovens to serve our own furnaces and the booming foundry trade . . . opening new coal and ore mines . . . enlarging and diversifying our production of coal chemicals and further modernizing our plants and equipment. This will result in more coal and coke, more coal chemicals and by-product gas and merchant iron. We are keeping pace with the Southeast's progress and readying our industry to serve its future needs."

* * * * * * * * *



Many types of industry in the strategically located Birmingham district are growing with the Southeast. Many are moving in. The Committee of 100 or any of the undersigned members of the Executive Committee will welcome the opportunity to give you confidential and specific data regarding the advantages of the Birmingham district for your plant, office or warehouse.

BIRMINGHAM

COMMITTEE OF 100

1914 Sixth Ave., N., Birmingham, Ala.

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Loveman, Joseph & Loeb

A. V. Wiebel
President
Tennessee Coal, Iron & Railroad Co.

Reader Service (Continued)

terial available in pipe insulation, standard blocks, beveled lags, and standard curved segments. **(F-35)**

Another glass product, glass block, is the subject of a bulletin published by American Structural Products Co. Non-critical glass block is being used as a replacement for worn-out window sash, according to the bulletin. **(F-36)**

Constant-delivery pumps for pressures up to 3,000 and 5,000 psi. are described in a bulletin issued by The Oilgear Co. The axial-piston pumps are suitable for maintaining high static loads. **(F-37)**

"Why Engineer an Industrial Floor?" That is the question put by a catalog published by Flash-Stone Co., Inc. The engineering of floors is said to be a highly specialized task that requires maximum planning for minimum long-run cost. **(F-38)**

Mixer selection and use is featured in a catalog put out by International Engineering, Inc. The booklet contains valuable information on portable mixers. **(F-39)**

To help steel users get the most out of available steels, U. S. Steel Co. has prepared a series of tables of multiple lengths. The tables help you to determine the exact size of any given number of lengths that can be cut from a longer length. **(F-40)**

Air conditioning in textile mills is the subject of a booklet issued by Carrier Corp. Pointing out that air conditioning saw its first major development in the textile industry, the booklet is chock-full of valuable data. **(F-41)**

How to frame, hang, mount, and support many kinds of mechanical and electrical equipment is shown in a manual published by Unistrut Products Co. Packed with pictures, the publication also contains pages of graphical symbols and their meanings. **(F-42)**

GENERAL

"Business Tips for the Small Businessman" is the title of a folder made available by the government Supt. of Documents. Thirteen selected U. S. publications are described. **(F-43)**

Special textile finishes—an up-to-date directory of trade names and manufacturers. Published by U. S. Testing Co., Inc. Also tells the fibers on which each finish can be applied. **(F-44)**

Management men can save the time they spend on detail and routine operations, according to a handbook released by Remington Rand Inc. Kardex visible files are compared to a simple bar chart. **(F-45)**

Hot coffee in large quantities can pay big dividends in making better workers, according to a booklet issued by Vacuum Can Co. The company makes the cans to carry coffee around after brewing. **(F-46)**

Expecting burglars? A new catalog on steel money chests has been prepared by Herring-Hall-Marvin Safe Co. Models for both home and office are shown. **(F-47)**

Know how to keep in touch with government publications? The Supt. of Documents has prepared a folder that explains what publications list the publications that are available. **(F-48)**

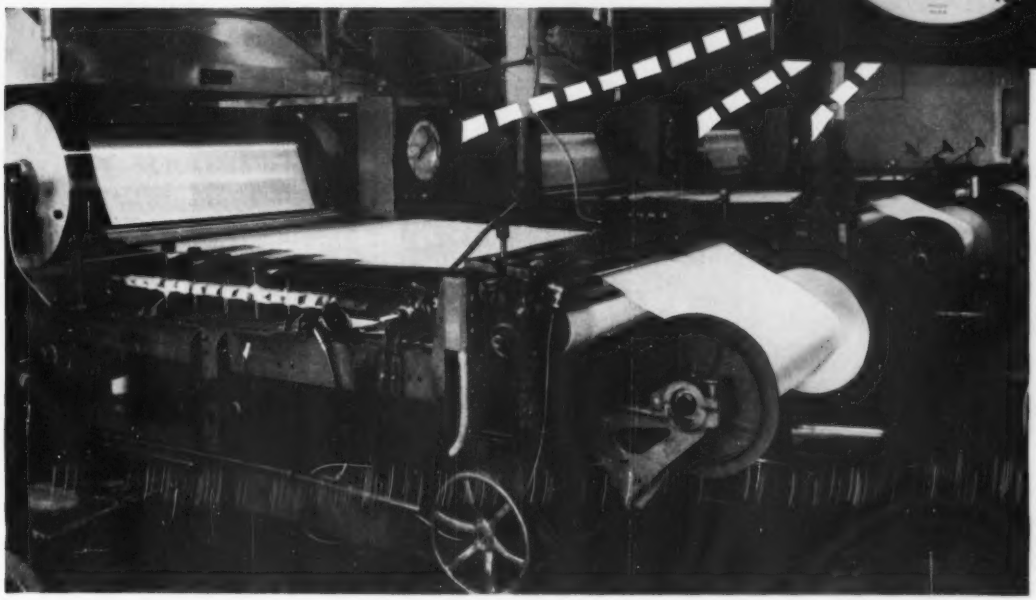
To shed a ray of light on problems with the new wage-hour law, Cincinnati Time Recorder Co. has prepared a booklet for you. The booklet is illustrated with clever cartoons and tells the story interestingly. **(F-49)**

A 2-in-1 machine operation for producing punch card reports and summary cards is described in a bulletin issued by Remington Rand Inc. Payroll records and reports are said to be prepared quickly, accurately, and inexpensively. **(F-50)**

NOW

AT A GLANCE

Scale graduated in percent regain.



...direct reading of rayon warp regain

Check These Outstanding Advantages

- *Only instrument calibrated directly for measurement of rayon warp regain.*
- *Extendable operating range for measuring moisture in viscose, acetate, blends and synthetic warp yarns.*
- *Supervised installation by qualified engineer.*
- *Speed control system allows maximum throughput in sizer commensurate with warp weight and cylinder heating capacity.*

The calibration of the new Electronic *Moist-O-Graph* for the measurement of rayon warp regain marks another important contribution by Honeywell. You no longer need use a conversion table, apply mathematical formulae, or go into mental gymnastics to get a reading.

The Electronic *Moist-O-Graph* gives you the *exact* measurement of rayon warp regain at sight. When the pointer indicates 8 on the scale *it means 8%*.

The Electronic *Moist-O-Graph* is the *only* instrument calibrated directly for measurement of rayon warp regain. It furnishes a permanent and easily understandable chart record . . . eliminates confusion, lost time and extensive operator education.

To increase weave room efficiency through more accurate regulation of high speed rayon slashers, take advantage of this new *Moist-O-Graph* control system. Check the outstanding advantages . . . write for Data Sheet No. 8-1-37 . . . and call in our local engineering representative.

MINNEAPOLIS-HONEYWELL REGULATOR CO., *Industrial Division*, 4509 Wayne Ave., Philadelphia 44, Pa.

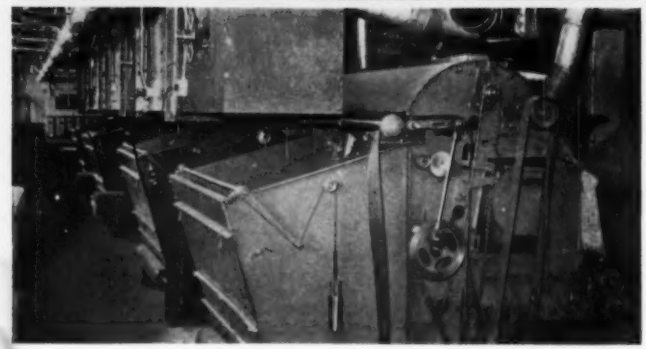
MINNEAPOLIS **Honeywell**

Brown Instruments

PROCTOR
Automatic STOCK CONVEYING SYSTEM

Engineered to Your Needs

★ CUTS COSTS
★ ASSURES CONTINUOUS OPERATION
★ ELIMINATES UNEVEN FEEDING



Automatic systems of Proctor patented design for delivering stock where it is wanted, when it is wanted and in the quantity required to assure continuous operation—are in use in many modern textile mills throughout the country. These systems have reduced labor requirements to a minimum and have removed all of the guesswork and expense involved in hand feeding. Stock, which may have been put through a variety of preliminary operations, is conveyed, usually by an overhead system, to a spot above either card hoppers or storage bins. If the system is feeding card hoppers, it may easily be tied in with electrical controls on the feeds in such a way that when all of the hoppers are filled, the system ceases to operate . . . and shuts off all preliminary equipment to prevent any overrun. As soon as any hopper requires more stock, the system automatically resumes operation. There are many variations possible in the arrangement of equipment to suit the needs of woolen, worsted, carpet yarn and asbestos plants. Equipment arrangement is job engineered to meet individual mill requirements. Write for additional information.

AN INVITATION TO PATENT HOLDERS

Have you patented equipment which you have developed for your own line of business that you would care to have developed, manufactured, or sold? If such equipment comes within the line of our manufacturing and selling experience, we would be pleased to have you contact us. We will discuss the matter with you without obligation. If there seems to be a mutual advantage we may be able to realize good returns on new developments.

For more information on Proctor equipment for the textile industry—see our catalog inserts in McGRAW-HILL TEXTILE CATALOGS AND DAVISON'S TEXTILE CATALOGS.

PROCTOR & SCHWARTZ INC •
710 TABOR ROAD PHILADELPHIA 20 · PA ·

Designers and Manufacturers of Automatic Blending and Stock Conveying Equipment • Carding and Garnetting Machines • Dryers for Stock • Yarn Piece Goods • Nylon Setting

Questions AND Answers

Three Simple Methods For Storing Loom Beams

Technical Editor:
Is there a practical method of storing loom beams? (9460)

Here are some sketches of loom-beam storage racks that have worked out in practice.

Fig. 1 shows a simple arrangement that can be used wherever there is room for one or more beams. It consists of a large strap hinge with an extension welded at one end. The hinge is fastened to a post, column, or wall with lag screws or bolts. One journal of the beam is set in a cup screwed to the floor, and the other journal fits into a hole in the extension that is swung into place when the beam is set upright.

Fig. 2 is a rack made of 2-in. pipe welded together. The pieces can also be fastened with threaded couplings. The legs of the rack are long enough so that the journals do not touch the floor. For compact storage, with the racks placed side by side, the beam can be placed on the end of the rack and slid into the desired position.

Fig. 3 shows a rack made of wood

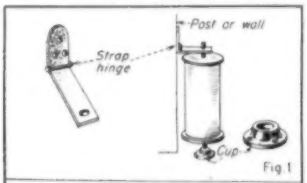


Fig. 1

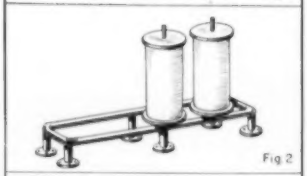


Fig. 2

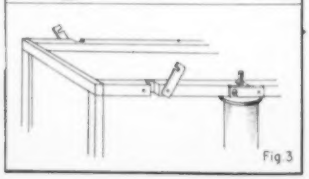


Fig. 3

Questions and Answers

(Continued)

or metal that will hold a large number of beams in a small space. The upright journal rests in a notch cut in the top of the rack and is held in place by a pivoted latch. The other journal rests in a cup fastened to the floor similar to that in Fig. 1.

These racks can be used for the storage of empty beams, for full beams, and even for full beams with patterns attached. There are other methods of storing beams such as a double-decked rack with runners of angle iron in which the beam rests parallel to the floor. There are also trucks and dollies that can be used as storage racks.

How To Eliminate Smelly, Stiff Wool Blankets

Technical Editor:

What can we do about complaints that our wool blankets do not launder well? Housewives say that the soap breaks down and the blankets come out "smelly," stiff, and not clean. (9463)

These blankets were dyed with the chromiferous or metalized dyes. These dyes require large amounts of sulphuric acid in the dyebath. The water rinsing that follows the dyeing cycle does not remove much of the acid because of the acid's affinity for wool. The finished blankets, therefore, contain acid, which breaks down the soap in laundering.

Blankets should be neutralized in the dye kettle that follows the after-dyeing rinse. Treat with 5% bicarbonate of soda (based on the weight of the goods). Run for 20 min. at 120° F. and follow with a 30-min. rinse. This treatment will leave blankets in a neutral condition and will affect the shade only slightly.

Blankets thus neutralized can be laundered with a mild, neutral soap without danger of the soap breaking down.

Ninon-Fabric Construction

Technical Editor:

What is the construction of a ninon fabric? (9464)

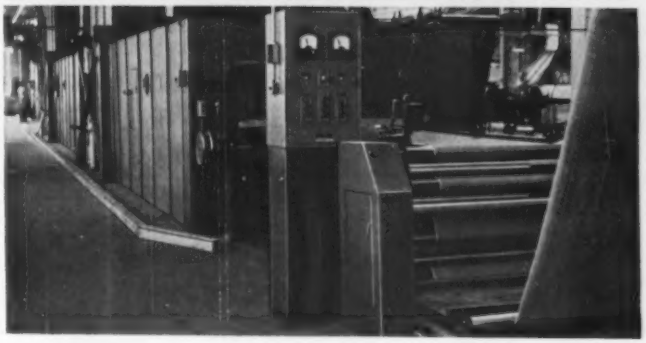
Ninon fabrics are high-count, sheer cloths similar to voiles. They are usually made of hard-twisted, combed yarns, which have been gassed, in the better qualities, before weaving. Yarns may be both single or plied, with counts running from 100/2 ply to 200/2 ply. For goods made from single yarns, the numbers are in the neighborhood of 60 to 70s.

The fabric counts are usually the

PROCTOR OVERFED PIN TENTERS

Guarantee Fabric Results THRU

★ CONTROLLABLE OVERFEED
★ ACCURATE GUIDING
★ BALANCED DRYING



Resin impregnated fabrics may be dried on the Proctor overfed pin tenter without danger of creasing or migration—and at the same time be delivered with the ultimate in shrinkage control. This relaxed drying which insures top fabric quality and a full hand is made possible by three features engineered into every Proctor installation. 1. An overfeed mechanism which makes it possible to overfeed fabric to pins in any percentage from minus 5% to plus 35% and have the cloth evenly and uniformly deposited. 2. A sensitive guiding mechanism which provides accurate guiding up to and in excess of 100 yards per minute. 3. A balanced drying system which assures maximum drying speed without fabric distortion.

Proctor overfed pin tenters are available in either the vertical type (Dalglish) or horizontal type (in cooperation with Winsor and Jerauld) for suitings, laces, tricots, specialty goods and standard fabrics. Write for complete information.

AN INVITATION TO PATENT HOLDERS

Have you patented equipment which you have developed for your own line of business that you would care to have developed, manufactured, or sold?

If such equipment comes within the line of our manufacturing and selling experience, we would be pleased to have you contact us. We will discuss the matter with you without obligation. If there seems to be a mutual advantage we may be able to realize good returns on new developments.

For more information on Proctor equipment for the textile industry—see our catalog inserts in McGRAW-HILL TEXTILE CATALOGS AND DAVISON'S TEXTILE CATALOGS.

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Designers and Manufacturers of Automatic Blending and Stock Conveying Equipment · Carding and Garnetting Machines · Dryers for Stock · Yarn · Piece Goods · Nylon Setting

For more information, write direct or use Reader Service post card.

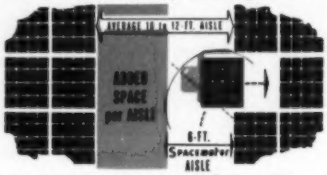
ADD 1/3rd MORE SPACE

NOW TO YOUR EXISTING STORAGE FACILITIES

with the RAYMOND SPACEmaker

ELECTRIC TIERING TRUCK

How wide are the storage aisles in your plant or warehouse . . . 10 feet . . . 12 feet? If so, you're wasting up to one-half this width making room for conventional-type tiering trucks!



The new RAYMOND SpaceMaker does away with waste aisle space — increases your storage capacity by as much as ⅓. It's a rider-type tiering truck that actually right-angle tiers loads 130" high from aisles only 6-ft. wide. Just look at these SpaceMaker advantages:

- **STACKS FROM 6-FT. AISLES** Exclusive RAYMOND design eliminates counterweight, shortens overall length. Result: SpaceMaker tiers loads from 6-ft. aisles — permits one extra row of storage for each aisle now in use.
- **MANEUVERS LIKE MAGIC** Offset drive wheel produces 200° turning arc — enables SpaceMaker to maneuver in aisles narrower than its own length with load.
- **WEIGHS SO MUCH LESS** Compact construction plus no counterweight result in far lighter truck. Thus, SpaceMaker operates in low-capacity elevators, on lighter-capacity floors — has lower battery capacity requirements, costs less to run.
- **WRITE TODAY FOR BULLETIN 703** — It tells the complete SpaceMaker story. And ask for a SpaceMaker demonstration — you have to see it to believe it!

Pioneers Since 1840

RAYMOND

SpaceMaker Model E25T Straddle-type, telescopic tiering truck. 2000-lb. capacity.

The RAYMOND CORPORATION
Formerly LYON-Raymond Corporation
9550 Madison St., Greene, N.Y.
Gentlemen: Please send me Bulletin 703 on your new SpaceMaker Electric Tiering Truck.

Name _____ Title _____
Company _____
Street _____
City _____ State _____

Questions and Answers

(Continued)

same (or very close to each other) in both warp and filling, such as 66x66 or 74x74. Because of the high twist —and the fact that the twisted, plied yarns generally follow the same direction—the fabric has an unusually full, crisp hand. The goods often are mercerized. This processing results in a rounded thread and a transparent appearance and emphasizes the fullness and crispness of hand.

Fishy Odors in Garments Can Be Easily Removed

Technical Editor:

Your December, 1950, issue referred to the use of urea to stop fabric odor. Is there a procedure to remove such odors from garments? We are having trouble with a fishy odor caused by treatment of garments with melamine formaldehyde. (9461)

It is true that with melamine resins a strong amine odor can be developed in the fabric as a result of the employment of ammonium salts as catalysts or because of decomposition of other catalysts containing nitrogen.

Conditions causing a development of this type are not too well understood. Certain processors find, when they are running under application conditions that do not cause odor, that suddenly a lot may be processed that will develop odor. Washing in an alkaline bath generally removes the odor and the amine-decomposition products that cause it.

Addition of a small quantity of urea, in the neighborhood of 5 to 10% on the weight of melamine resin, is usually sufficient to prevent or minimize odor development.

Traces of unreacted formaldehyde in the bath act on the catalyst and set up an odor reaction. Apparently the urea will react with formaldehyde preferentially. Any unreacted urea is washed out in the scouring bath. If the resin-treated goods have been cured and washed, after-treatment with urea does not prove of any value in preventing odor. Only additional washing will remove odor from the fabric after it has been finished.

Sodium Peroxide Still Used In the Textile Industry

Technical Editor:

During the last war, a substantial amount of sodium peroxide was allocated to the textile industry. Does this demand still exist? It is our impression that hydrogen peroxide is replacing chlorine compounds in textile bleaching, and I

"All of you should strive for what we at the James Hunter Machine Company call 'plus production' --that is, efficient operation of modern equipment, plus less down-time, plus quick, easy repair, and rapid parts delivery."
--James H. Hunter, in an address at Lowell Textile Institute

A new glare and heat reducing glass paint dries rapidly to make a weatherproof frosted permanent coating which may be applied by either brush or spray-gun.
--Rayon and Synthetic Textiles

A new method for stabilizing predominantly viscose fabrics against shrinkage through use of a cellulose ether has been developed by American Viscose Corp.
--Daily News Record

Elimination of unsightly bulges immediately below the waist on the fronts of male trousers is promised in a new slide fastener just developed.
--Apparel Manufacturer

Most of us are willing to follow the advice of our superiors if we can find any.
--Banking Magazine

Nine high-style cotton companies have formed the Guild of Independent Cotton Converters, and plan consumer and trade promotion of these fabrics.
--Printer's Ink

Flexseal bomb glass, a plastic glass laminate, literally breaks along a dotted line, hinges inward in four panes, when outside pressure builds up.
--Factory Management

"The present outlook is that wool production for the coming year will meet world wool demands without requiring the use of existing inventories."
--Wool Bureau

The Army Quartermaster Corps is reportedly engaged in research for dyeing and finishing processes to provide optimum concealment of troops from infra-red detection devices during night combat.
--Textile Industries

Due to shortages of wood pulp, one Chicago newspaper is making test runs of straw paper.
--U. S. Dept. of Agriculture

The Federal Trade Commission's new rules on trade identification of rayon and acetate has prompted an intensive campaign to acquaint retailers and consumers with the new terminology.
--Daily News Record

Larger supplies of iron and steel scrap are urgently needed by the nation's steel plants.
--Steel

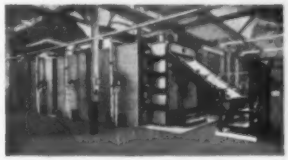
Men's wear dollar volume at the mail order houses picked up appreciably in September, ranging from 5 to 10 per cent ahead of a year ago.
--Daily News Record

A new method for speeding mercerization of cotton goods and reducing hazards of processing, has been discovered at the Univ. of New Hampshire.
--University Bulletin

The Tristimulus color meter, an electronic device, surpasses the sensitivity of the human eye in matching even darkest textile and dye colors.
--Electronics Magazine

In the last half of 1951 American businessmen will spend nearly 13½ billion dollars in plant expansions.
--Wall Street Journal

PREPARATION AND WET FINISHING EQUIPMENT FOR WOOL, WORSTED & SYNTHETICS

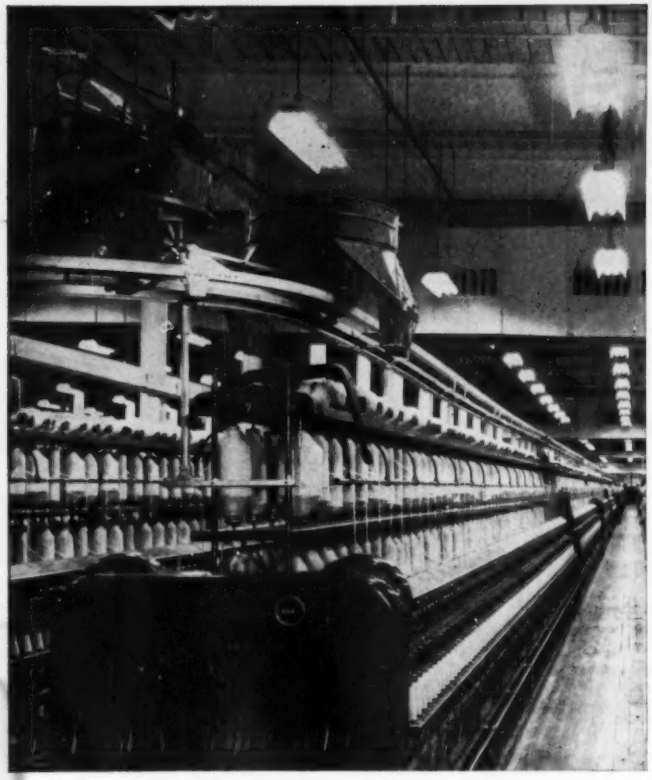


News from the field

The patented Hunter Uniflow Dryer has proven in scores of successful installations to be the most productive, efficient, return-type pin tenter available. Operated at speeds up to 90 yards a minute requiring a minimum of floor space, the machine soon pays for itself with savings of steam and labor. The patented air flow insures even drying from side to side and helps eliminate the dangers of flock and grease spots. The Uniflow can be equipped with automatic guides, overfeed, temperature controls, etc.

JAMES HUNTER MACHINE CO.

FOUNDED 1847 North Adams, Mass.



Continuous Cleaning

Ringrail to Rafters

They surely must be doing a job, these Parks-Cramer Traveling Cleaners, for they are now standard equipment for more than 17,000,000 spinning, twisting, winding, spooling, and warping spindles.

And now its own twin, the Up-draft Cleaner, prevents lint accumulations topside. With Frame Cleaners, it runs tandem. In cardrooms or in other preparatory areas, it runs solo. And will it keep lights, conduits, ducts, and such, clean? You wouldn't know the place!

Parks-Cramer Company

Fitchburg, Mass. PARKS Certified Climate Charlotte, N.C.

Questions and Answers

(Continued)

wonder if sodium peroxide is losing out. (9462)

There is still a fair volume of sodium peroxide used—primarily by knit-goods manufacturers and also by some package dyers. Many knit goods are scoured and bleached in reel machines, although some of the work is done in kiers.

There are two general methods in which sodium peroxide is used for bleaching knit fabrics. It may be used by itself, or it may be mixed with hydrogen peroxide. If used by itself, the pH is usually adjusted with boric acid. The sodium borate formed acts as a buffer and stabilizer in boiling and assists in scouring the cloth. Generally, after the peroxide treatment, the goods are given a sodium-hypochlorite bleach.

Sodium peroxide is also mixed in various quantities with hydrogen peroxide, the mixture being buffered with the usual sodium silicate. When such mixtures are used, it is not always necessary to follow the peroxide bleach with a chlorine treatment.

The reason sodium-peroxide bleaching is used in this field is that a certain softness of hand results. Since the amount of silicate with sodium peroxide can be reduced from what is required with hydrogen peroxide, there is less danger of fabric harshness. Also, the scouring and bleaching are usually combined in one operation. Normally, in piece goods bleaching, scouring of the goods is carried out first, then bleaching.

You are correct in stating that hydrogen-peroxide consumption is on the increase, with chlorine consumption probably on the decrease. This change is due to the fact that nearly all bleacheries have installed continuous ranges designed for peroxide. Although sodium-peroxide consumption is small compared with that of hydrogen peroxide, we would say there is still a sizable volume consumed by the textile industry.

New Spot-Cotton Exchange. The Fresno, Calif., Cotton Exchange, the first to be opened west of Texas, has begun business officially as a central information center for the quoting of spot cotton in California. The exchange was organized to obtain recognition for irrigated cotton and put it on an equal basis with rain-grown cotton. The exchange has 100 members and 65 associates. California is counting on a record 1,750,000-bale crop this year from approximately 1,250,000 acres.

"light soaping is enough!"

—TO RINSE PRINTING THICKENER OUT COMPLETELY

AMBERFLO, a highly soluble printing thickener, deposits a soft print. Light washing rinses it out quickly. Easily. Completely. Using tap water. Result? Happier production men. And fabrics that warm a fashion designer's heart with their softness . . . sparkling color . . . finer hand and body.

AMBERFLO eliminates cooking, cooling and expensive mixing equipment. Simply blend it with chemicals and water. In a few minutes, the "color" is ready. Splitting is minimized on "Sheers" and other fragile fabrics, because it deposits a smooth, pliable film. Color yield is higher. Penetration and detail are excellent.

AMBERFLO is recommended for vat, rapidogen, direct, acid and acetate colors. Also white discharge.

National Starch Products,
270 Madison Avenue, New York 16, N. Y.

National
STARCH PRODUCTS

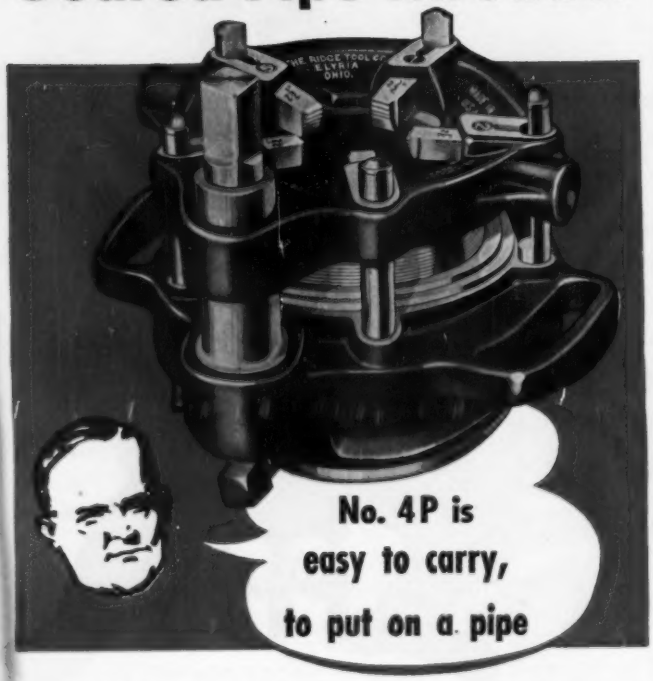
We want to know more!

We're interested in AMBERFLO—National's easy-rinsing, ready-for-use printing thickener.

☐ *We want more technical data.*
☐ *We'd like a plant demonstration.*

Name _____ Title _____
Company _____
Address _____
City _____ Zone _____ State _____

Easier to Handle this RIDGID Geared Pipe Threader



● You'll like the balanced loop handles that make it easy to swing the 4P around where you want it. Making it still more of a work-saver, mistake-proof workholder sets to size *before* you put it on pipe—only one screw to tighten, no bushings to fool with. 4 sets of 5 high-speed steel chaser dies give quick, clean threads on 2½", 3", 3½" and 4" pipe. Ratchet handle furnished—for power threading use with RIDGID Universal Drive Shaft and Power Drive. Save your muscles—buy this easier-to-handle RIDGID 4P at your Supply House.

RIDGID

★ Work-Saver Pipe Tools ★

Yarn Preparation

(*Continued from page 115*)

a card or lap winder, is said to aid materially in smoothing out the yarn produced and eliminate some operations, particularly in staple-fiber processing.

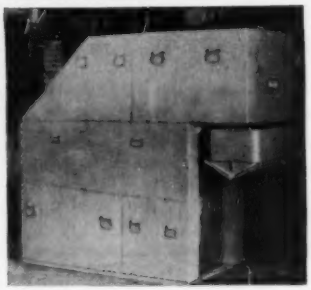
In the new feeder, fiber is picked up initially by a spiked apron from a hopper as in a conventional feeder. A conventional-type strippng roll removes excess fiber from the spiked apron and drops it back in the hopper. However, fiber clinging to the apron and passing over the top is not removed by a stripper roll, but is taken off the spiked apron by an air current.

This air current is drawn by a fan through an air screen on which the mat of fibers delivered by the machine is formed. If the mat formed is already uniformly heavy, the air current passing by the spiked apron is weak, and will not remove fibers from the apron. Therefore, some fibers may be allowed to recirculate into the hopper.

Thus, the spiked apron may continue to operate, but no fiber may be fed to the remainder of the system until the density of the web formed on the air screen is sufficiently low to increase the strength of the flow of air.

Waste Feeder

Is Smaller Fiber Meter



THIS 24-IN. WASTE FEEDER, a smaller counterpart of the 36-in. Fiber Meter, has been announced by W. D. Dodenhoff Co., Inc., Greenville, S. C. The new unit automatically weighs out waste in increments of as little as 2 oz., with a variation of ½ oz. Any staple fiber can be fed. Over-all dimensions of the machine are about 4x2½x5 ft.

Ambler Superdraft System Available in U. S.

Availability of the British-developed Ambler Superdraft system on new frames or as conversion units for existing frames of any make has been announced by McGlynn Hays Industries, Inc., Belleville, N. J., U. S. licensees.

The ability claimed for the system to produce top-quality and higher-strength yarns at extraordinarily high drafts offers several advantages. The most costly drawing and roving operations are eliminated;

For more information, write direct or use Reader Service post card.

Increase
YOUR KNOWLEDGE OF BOBBINS
this Easy Way

Write today for this Lestershire book which contains 29 large clear photographs of different types of aluminum, magnesium, and fiber bobbins. Each photo is accompanied by an informative story concerning the bobbin illustrated.

This book and the individual bobbins portrayed are the outcome of years of careful research and experience — experience gained from the Lestershire policy of considering each installation as "specialized." This policy has assured Lestershire bobbin users of the maximum of satisfaction, as the bobbins are properly fitted to the use and operating conditions.

You'll want to keep this book on file for ready reference; so use the handy coupon below.

LESTERSHIRE
SPOOL & MFG. CO.

Subsidiary of National Vulcanized Fibre Co.

LESTERSHIRE BOBBINS EVERLASTING

JOHNSON CITY, NEW YORK

LESTERSHIRE SPOOL & MFG. CO.
JOHNSON CITY, NEW YORK

Send me without obligation the LESTERSHIRE BOOK ON BOBBINS.

NAME.....

POSITION.....

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CITY..... ZONE.....

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A SHORT STATEMENT ON

STEAM TRAPS

THAT IS LONG ON GOOD SENSE:

A Steam Trap has but *one* function—to drain condensate from steam lines. Right?

Now if one brand of Steam Trap can drain *twice* as much condensate $ $ = $ under equal conditions, as another of the same size and price—it's just plain common sense to buy that brand, isn't it?

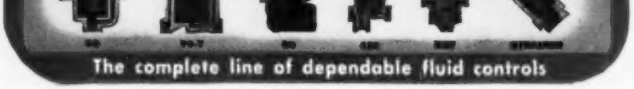
Clark DUO-STEP LEVERAGE STEAM TRAPS have proved in tests time and time again that they *can* drain *twice* the condensate of ordinary traps.

So—do as thousands of smart steam engineers have done:

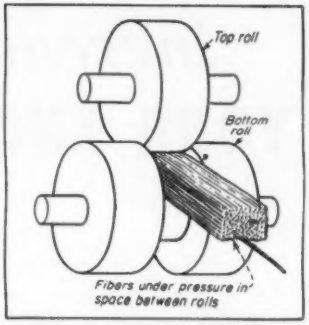
SWITCH TO CLARK DUO-STEP STEAM TRAPS FOR DOUBLE DRAINAGE EFFICIENCY!

THE CLARK MANUFACTURING COMPANY
1835 East 38th St. • Cleveland 14, Ohio

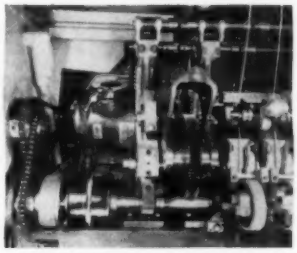
Clark
THE HOME OF DUO STEP LEVERAGE



The complete line of dependable fluid controls



AMBLER-SYSTEM SECRET is that fibers are held under pressure in a rectangular area between rolls that do not touch. Fiber control is exerted by surrounding inter-fiber pressure.



NO DRAFT-CHANGE GEARS! To change the draft on a frame improved with Ambler Superdraft, simply turn the crank on a variable-speed motor geared to the front roll.

thus the amount of preparatory spindlage is reduced to one-eighth that required for preparation on the conventional system.

With Ambler, coarse wools, mohair, and long-staple synthetics and blends—as well as the finest quality of wool and short-staple synthetics—can be spun on the same machine. Even cotton has been spun on a conventional worsted frame equipped with the Ambler system.

The improved machine allows a draft change (from 20 to 200) by simply turning the crank on a variable-speed motor geared to the front roll. No draft-change gears are required.

Secret of the Ambler system is maintaining twist in roving in drafting areas by not flattening roving between rolls. Fibers are held under pressure in a rectangular area between rolls that do not touch. Control of each fiber is exerted by inter-fiber pressure of surrounding fibers.

The conversion unit available for existing frames is flexible and may be applied to practically any type of spinning frame.

New Opener Gives Cleaner Cotton, Loftier Yarn

A new machine for opening and fluffing baled cotton has been developed at the Southern Regional Research Laboratory,

SEE SUPREME'S SUPER-RIBBER ADVANTAGES

Through A Knitter-Mechanic's Eyes

★ **GIVES MULTI-MACHINE PRODUCTION WITHOUT "KNOCKING ITSELF OUT"**

Up to 56 Yards Per Hour from a *single* machine . . . Max. feeds per diameter inch means profit boosting production without machine-busting rpms. Less wear — less downtime — longer machine life.

★ **SIMPLER TO RUN AND MAINTAIN**

Flip-of-the-finger stitch adjustment . . . Open, easy-to-get-at knitting system . . . Individual, channeled cams —no chance of smash-ups . . . Direct, convenient, man-to-machine controls . . . Foolproof synchronization of dial to cylinder needles . . . Easier for new, inexperienced operators.

★ **HAS QUICKEST, EASIEST, SWITCHOVER FROM PLAIN TO SWISS RIB**

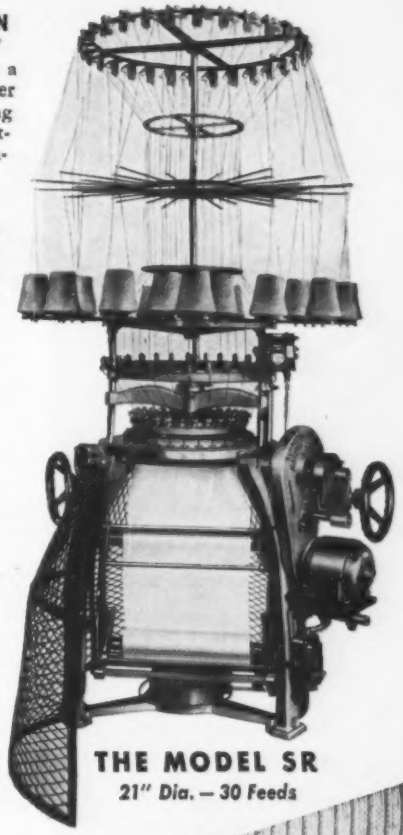
Exclusive, new method eliminates changing cams — gives immediate switch.

★ **KNITS "SUPER ELASTIC" QUALITY RIB CLOTH FROM PRACTICALLY ANY YARN**

Handles wide range and variety of yarns with minimum adjustments. Minimizes damages from weak or slubbed yarns. Uniform, high elasticity gives better size and shape retention. Dogless—no pinch lines.

★ **HAS SUPREME'S PROVEN-IN-THE-MILL FEATURES**

Sturdy, tripod construction . . . Trouble-free design and anti-wear engineering . . . Stationary Yarn Stand . . . Revolving, floating take-up and roll-up . . . Rugged, smooth-running unit motor drive. Patented multi-disc clutch . . . Starts easy . . . Stops fast.



THE MODEL SR

21" Dia. — 30 Feeds

The Supreme Model SR is available in a complete range of sizes from 7"— 10 feeds to 30"— 84 feeds. For further details, write for free folder.

SUPREME

KNITTING MACHINE CO., INC.

107 JOHNSON AVE. BROOKLYN 6, NEW YORK, N. Y.

Southern Representative and Showroom:
The Mallack Co., 711 S. Tryon St., Charlotte, N. C.

NOW added versatility for the Beckman Model B Spectrophotometer . . .

A NEW REFLECTANCE ACCESSORY that simplifies color evaluation

To further increase the wide range versatility of the well-known Beckman Model B Spectrophotometer, a new Reflectance Accessory is now available for use on opaque, colored samples in solid, liquid or powder form. There are many useful applications for this accessory in the precise evaluation and comparison of color intensities and hues.

For example, diffuse reflectance measurements are useful for accurately controlling the whiteness of talc . . . for controlling artificial coloring of foodstuffs such as butter, catsup, and condensed milk . . . for calculation of dye bath recipes in textile processing . . . for grading the color of paper and the whiteness of flour . . . for matching and controlling shades of powder, rouge and lipstick, paints and inks and many other products where accurate color measurements are essential.

SEND FOR NEW BULLETIN

Important features of this new Reflectance Accessory are outlined at right. A bulletin describing the unit in greater detail will gladly be sent. Ask your nearest Beckman Instrument dealer for Bulletin B-235—or write direct!

BECKMAN INSTRUMENTS INC

SOUTH PASADENA 12, CALIF.

Factory Service Branches:
Chicago • New York • Los Angeles

Beckman Instruments include: pH Meters and Electronic Spectrophotometers—Radioactivity Meters—Special Instruments

Easily Installed

The attachment consists of an integrating sphere in holder and a sliding sample tray which are easily installed in place of the standard Model B sample compartment and cell carriage.

Precise Measurements

To permit utmost measurement precision, a detent mechanism operated by a convenient push button in the sample tray knob exactly repraduces forward and backward position of the sliding sample tray. The resulting precision is particularly valuable for accurate measurements on samples with rough surfaces or non-homogenous colors.

Readings taken rapidly are reproducible to at least 1%—with careful technique even greater precision is obtained.

Operating Convenience

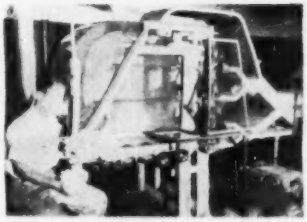
Special provision has been made so that liquid samples can be conveniently inserted without spilling . . . powdered samples without disturbing the smoothed surface.

Sample Size

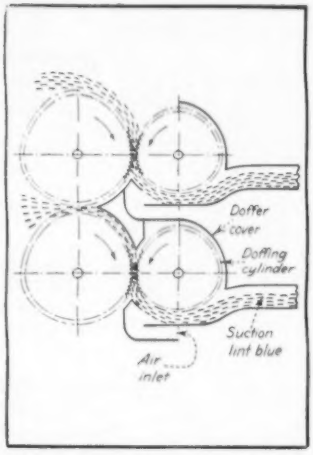
Sample size is approximately 1" x 1 1/4" with a maximum thickness of 5/16"—ample for most applications. Or, by simply rotating the sphere 180° in its holder, larger samples can easily be accommodated.

Quick, Easy Readings

Accurate color measurements are made with great speed and simplicity. First the instrument is adjusted to read 100% reflectance on a white standard (such as MgO), the sample is moved into position and the percent reflectance (compared to the standard) is then read directly from the meter. It's as simple as that—and the three-compartment sample tray permits quick comparison of two samples and a standard on each run.



TWO EQUAL WEIGHTS of cotton fiber are shown before and after processing through the new opener in the background. The opener will be useful in the processing necessary for mechanically harvested cotton.



COTTON IS DRAWN from a rotating "roll" in hopper by wire-wound rollers. Self-doffing doffer rolls remove fiber from saws.

U. S. Dept. of Agriculture, New Orleans, La.

The new machine is said to open baled cotton rapidly to a loose fluffy condition, similar to that of cotton lint right after ginning and before baling. This opened condition permits improved cleaning and blending of the fiber in conventional textile equipment.

An opener of this type large enough to loosen and fluff four bales (about 2,000 lb.) of cotton an hour occupies only about 6x8 ft. of floor space. Larger machines that will open as much as 10 tons of cotton an hour can be built.

In contrast to ordinary openers, which employ blades or beaters, the new machine consists of a number of toothed, gin-saw or "licker-in" wire cylinders, arranged one above the other and all rotating in the same direction. The cotton forms a rapidly revolving soft roll as it feeds into the machine on a conveyor belt. Small tufts are pulled out of this roll by the rotating cylinder teeth and are then removed from the teeth by means of a new doffing apparatus with metal blades.

Now, it's a case of better fabrics . . . faster. Standard's quality products and technical know-how can help you meet government standard specifications. Here's a list of Standard product uses from carding right on through to finishing.

For faster, better carding of cottons, rayons and synthetics, use Standapol and Stantex products.

For faster and better desizing, use Stantex Penetrator 40.

Improve your sulphuric acid sour by using Stantex Penetrator 40.

Use Turpenol XXC in kier boiling, continuous boiling, and jig boiling to save time, improve quality and lower costs.

In Rodney Hunt slack soapers . . . use Pyrotex, a detergent that cleans in any kind of water at any temperature.

Mercerize with Mercetex 756 at any concentration up to 60° Twaddle for perfect lubrication and penetration. Mercetex 756 stores well in reclaimed Caustic and the wetting speed is just right.

Dyebath . . . Vats, Sulphurs or Directs, use Penetrator 111 and Sanforol 50D. Stop your scum and dye spots, and get good penetration.

For dispersing, retarding and leveling light and dark shades on difficult government fabrics, use Retardine and Retardine D.

Clean up your dyed goods by using Pyrotex, Stantex NR-2, and Standapon. Excellent detergency, stability at boil, stability in acids or alkalis, and stability in soft or hard water. Easily rinsible. Economical to use.

Finishing and Sanforizing . . . Standapol 16 and Sanforol 50. They give the correct hand and softness, have excellent sewing characteristics, and they will not injure the most delicate skin.

Write today for complete details on the process and Standard product in which you are interested.

STANDARD CHEMICAL PRODUCTS, Inc.

1301 JEFFERSON STREET, HOBOKEN, NEW JERSEY

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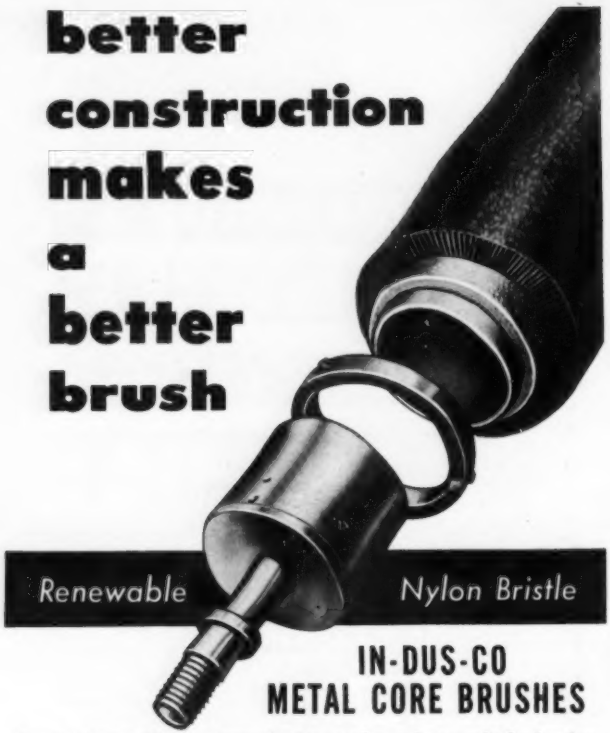
*Reg. U. S. Pat. Off. *Manufacturer of:* Pyrotex—Standapol*—Stantcosine—Retardine*—Standafin—Stantex*

better construction makes a better brush

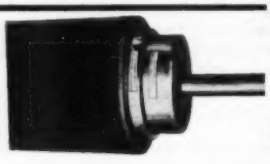


IN-DUS-CO METAL CORE BRUSHES

have all the valuable features of other good metal core cylinder brushes plus some that are distinctively their own.

Their tubular metal cores are of heavy gauge steel or aluminum and cannot bend, warp, or split as wood cores do.

The nylon bristle, evenly distributed over the face of the brush, is bound in position and permanently sealed with moisture-, acid-, and alkali-proof plastic material No wires or other metal bindings used. The result is extreme lightness as well as rugged strength for long efficient use, with a smooth, solid surface that means longer bristle life.

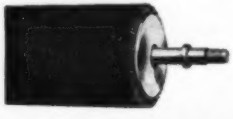


RAISING BRUSH

CAN'T STREAK GOODS—

Because of uniform, dense surface presented by nylon bristle, every bit of the nap in woolens and worsteds is raised and properly sheared. Can't streak goods as tufted brushes do.

Used by leading woolen and worsted manufacturers.



FURNISHER BRUSH

USERS SAY

"Combines advantages of light weight, strength, and a firm bristle surface that presses evenly from end to end of the brush.

". . . There is no tendency for unsupported bristle ends to bend or snap off.

". . . more easily cleaned after use.

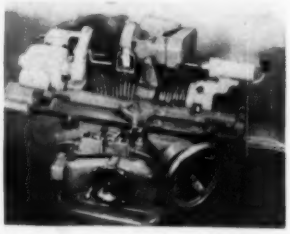
". . . lasts indefinitely."

INDUSTRIAL *Brush Company*

WOODSIDE AVENUE • LITTLE FALLS, NEW JERSEY

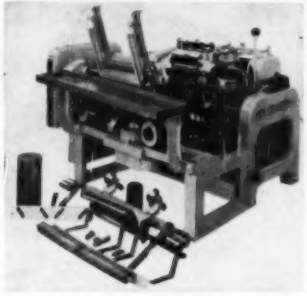
For more information, write direct or use Reader Service post card.

Cot-Grinder Traverse Control Is Automatic



A NEW COT GRINDER equipped with a full set of tapered chucks is available from Dayton Rubber Co., Greenville, S. C. The 36x60x 41-in. grinder buffs to close tolerances all cots from ½ to 8 in. in diameter and to 16 in. in length. For large-diameter worsted cots, positive action is provided by a special dog on the driving wheel.

Gill Reducer Has New Balling Head



A NEW BALLING HEAD for the standard Holdsworth gill reducer has been introduced by Atkinson, Haserick & Co., Box 2125, Boston 6, Mass. Available in either single- or double-head models, the balling head needs only the few parts shown in the picture to change from single to double delivery.

Twisters, etc.

(Continued from page 119)

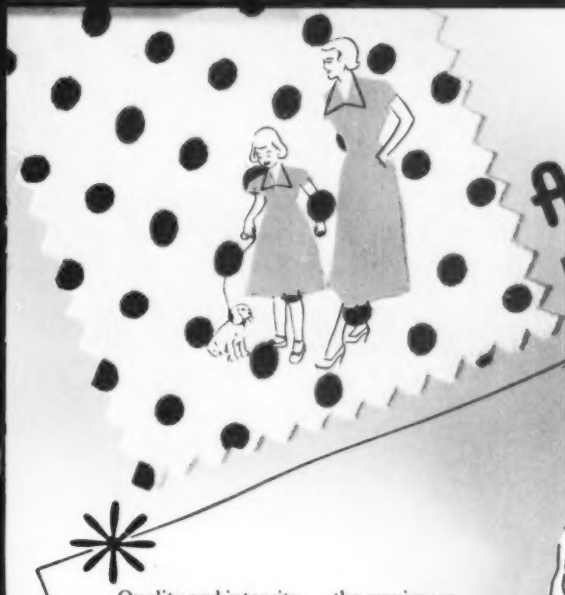
The new creel warps from an over-end package. The cone pegs have been mounted at a slightly upward-inclined angle to assist in keeping badly formed cones firmly in place on the pegs.

Horizontal supports have been added to brace the horizontal bars, and several 1-in.-diameter chromium bars have been placed 3½ in. away from, and level with, the tension motion. Steamed twists, which otherwise may snarl badly, can be wound once or twice around these bars to keep snarls from getting into the warp.

The warping machine itself now has a solid swift 5 ft. in diameter and a 10-in. ramp at an angle of 10°.

The results of the improvements in the

AHCOVAT DYES

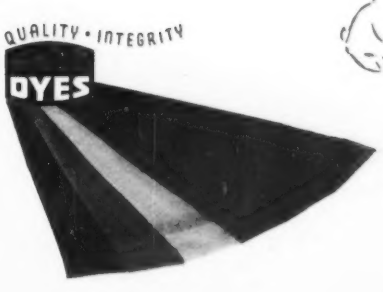


Quality and integrity . . . the maximum of each goes into every pound of AHCOVAT DYES. The natural result: vat dye performance you can always depend upon!

AHCOVAT PINK RL

For printing and dyeing on dress goods, draperies and upholstery fabrics, this AHCOVAT dye gives extremely high light fastness and brightness of shades.

Ask for complete technical information and shade card.



ARNOLD, HOFFMAN PROVIDENCE RHODE ISLAND

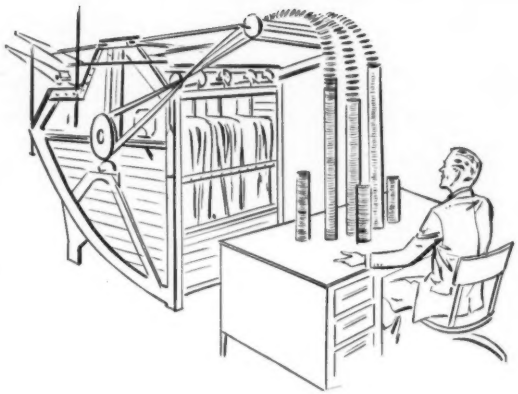
Associated with
Imperial Chemical Industries Ltd.
London, England

ARNOLD, HOFFMAN & CO., INCORPORATED • EST. 1815 • PROVIDENCE, R. I.

Offices: Charlotte, Cincinnati, New York, Philadelphia, Providence
Plants: Charlotte, N. C. Cincinnati, Ohio Dighton, Mass.

The Fleet Line

STAINLESS FULLING MILL



The FIRST stainless fulling mill on the market, there are now several hundred of these machines in use. Time after time, when replacing obsolete fulling mills, it has paid for itself in 3 years or less, through savings effected. Here are some of the reasons why.

INCREASED PRODUCTION — Big capacity mill can handle 12 pieces of men's wear or 16 pieces of dress goods in one load.

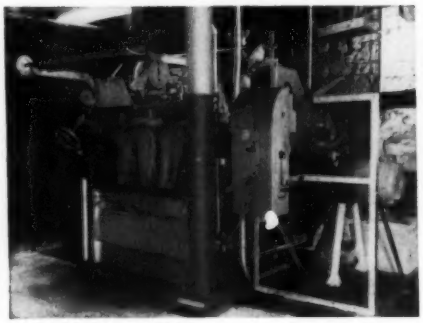
LOAD FLEXIBILITY — Even 12 piece (800 lbs.) mill can handle as few as 2 pieces.

IMPORTANT SAVINGS — Soap — 20%; dead loss — 1/10 to 1/4; fulling time — 10 to 33%.

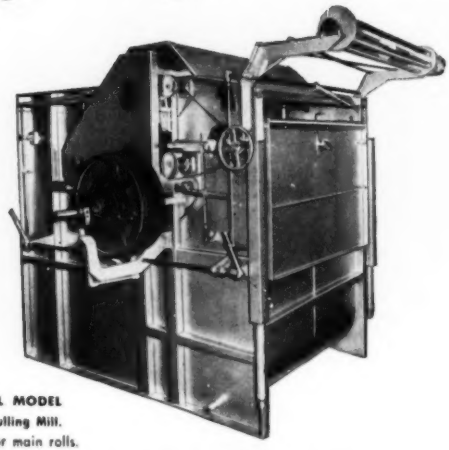
RUGGED CONSTRUCTION — Making for long life and minimum maintenance.

Features which contribute to better quality of product will be explained on request.

In 3 years or less
YOU GET YOUR INVESTMENT BACK



STANDARD MODEL
With stainless steel parts contacting cloth.



NEW ALL STAINLESS STEEL MODEL
Air-Fleet Line Stainless Steel Fulling Mill.
Finger Tip Pneumatic controls for main rolls.

RIGGS AND LOMBARD, INC.

FOOT OF SUFFOLK STREET, LOWELL, MASS.

The Fleet Line — A complete line of modern equipment to successfully handle present day wet-finishing, carbonizing and dyeing requirements.

DOMESTIC & CANADIAN AGENTS: — Paul A. Merriam, 1491 Broad St., Prov., R. I. • Charles H. Dunker, 1236 So. Maple Ave., Los Angeles 15, Calif. • Albert R. Breen, 80 E. Jackson Blvd., Chicago 4, Ill. • Francis H. M. New, P. O. Box 1083, Greenville, S. C. • H. E. Mott Co., Ltd., Brantford, Ont.

EXPORT AGENTS: — Latin America — Balkan States, Egypt, Palestine, India — Meyer, Lyra & Co., 228-229 Fulton St., N. Y., N. Y. • South Africa — Noel P. Hunt, Pty., Ltd., Embassy House, 326 West St., Durban, South Africa • China — G. R. Coleman & Co., Inc., 50 Church St., N. Y., N. Y.

A SOLID SWIFT is used in the new warper developed by John Hattersley and Sons, Ltd. The creel moves automatically as the headstock moves, to build up the section being warped and when a setting for next section is made.

warper and creel are said to be better selvages, less movement of the cloth in the loom and a reduction of 15 to 20 lb. on the tension lever in the loom.

Yarn-Dyeing Tubes Wound at Low Tension

A DUROMETER READING of 5 shows low density of dyeing tube after winding for package dyeing with new equipment developed for Foster model-75 winder.

Equipment for successfully winding acetate- and viscose-rayon yarns onto 1¼-in. metal package-dyeing tubes has recently been developed by Foster Machine Co., Westfield, Mass.

Existing Foster model-175 winding machines can be readily fitted with this new equipment, which consists of 1¼-in. holders and pressure-roll assemblies. The winding is done directly from the supply and requires no special feed rolls.

Rayon-yarn tension can be as low as 4 grams and Durometer readings down to 5. Very soft packages can be made that greatly facilitate quick and uniform penetration of the dye liquor.

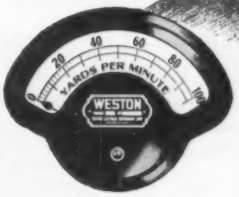
Electric Brake Improves Warper Operation

A new series of electric brakes and clutches especially designed for use on high-speed warpers has been developed by Warner Electric Brake & Clutch Co., South Beloit, Ill.

Use of the new electric brake is said to

% SHRINKAGE
FEET PER HOUR
GALS. PER MINUTE

All measured electrically with
WESTON
TACHOMETERS



Precise indications from
ONE rotating shaft

Simply mount the compact a-c or d-c Weston generator at the rotating shaft or part, and wire to one or more indicators placed wherever desired. Indicators can be calibrated for any function of R.P.M. Speed changes indicated instantly and smoothly without pointer oscillation.

Speed-ratio from
TWO rotating shafts

New WESTON Tachometer indicates the speed-ratio of 2 rotating shafts or parts. Indicates directly the speed-ratio of rolls, the % stretch or shrinkage of textiles, elongation of metals, etc. Remote and duplicate indications possible, with scale marked in desired units.

New SLOW-SPEED Electrical Tachometer

Expanded scale accurately indicates speeds as low as 1 R.P.M. without pointer oscillation. No intermediate gearing employed. Complete data from your local WESTON representative, or by writing Weston Electrical Instrument Corporation, 637 Frelinghuysen Avenue, Newark 5, New Jersey, manufacturers of Weston and TAGliabue instruments.

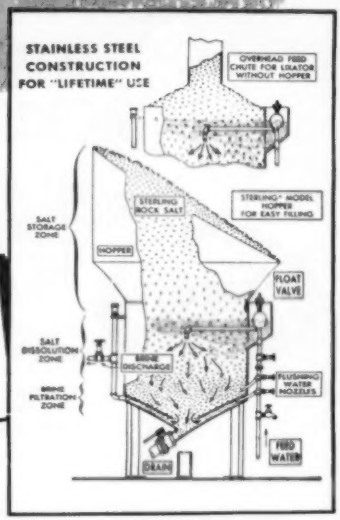
WESTON Instruments

For more information, write direct or use Reader Service post card.

BRINE! EXACTLY RIGHT WITHOUT MEASURING or STIRRING

JUST TURN IT ON!

STERLING ROCK SALT
BRINE DELIVERED BY PIPE
TO EVERY POINT IN YOUR PLANT
- DYEING MACHINES
- DYEING VATS
- ZEOLITE WATER SOFTENERS



HOW LIXATOR* WORKS

In the dissolution zone—flowing through a bed of Sterling Rock Salt which is continuously replenished by gravity feed, water dissolves salt to form 100% saturated brine. **In the filtration zone**—through use of the **self-filtration** principle **originated by International**, the saturated brine is thoroughly filtered through a bed of undissolved rock salt. The rock salt itself filters the brine. Nothing else is needed.

WHAT THE LIXATOR PROVIDES

- ✓ **Chemical and bacterial purity to meet the most exacting standards for brine.**
- ✓ **Unvarying salt content of 2.65 pounds per gallon of brine.**
- ✓ **Crystal-clear brine.**
- ✓ **Continuous supply of brine.**
- ✓ **Automatic salt and water feed to Lixator.**
- ✓ **Inexpensive, rapid distribution of brine to points of use by pump and piping.**

Savings up to 20% and often more in the cost and handling of salt have been reported by many Lixate users. Why not investigate?

• Say good-by to "guesswork" and bother! You can eliminate shoveling, hauling, and laborious hand stirring of salt and water—with International's Lixate Process for Making Brine. Assures accurate salt measurement every time. Stops waste through spilling. Saves time and labor.

• The Lixator *automatically* produces 100% saturated, free-flowing, crystal-clear brine which may be piped to as many points in your plant as you wish—any distance away—by gravity or pump. YOU SIMPLY TURN A VALVE to get self-filtered LIXATE Brine that meets the most exacting chemical and bacterial standards.

An INTERNATIONAL Exclusive

The **LIXATE*** *Process*

FOR MAKING BRINE

*REG. U. S. PAT. OFF.

INTERNATIONAL SALT COMPANY, INC., Scranton, Pa.

offer these improvements in the warping operation:

1. The warper can now be stopped almost three times as fast as formerly so that loss, tangling, and snarling of yarn ends are avoided.
2. Skidding of the yarn is virtually eliminated.
3. The simplified brake system requires no adjustment for wear, with the result that maintenance expenses are reduced.

Winder-Redraw Machine Nearly Automatic

SELF-THREADING TENSION and full-spool stop motion are features of this new winder-redraw frame.

A new type of winder-redraw machine developed by Sipp-Eastwood Corp., Paterson, N. J., has a self-threading tension, self-opening spindleless attachment, and full-spool stop motion.

Traverse adjustment, independent on each side of the machine, can be adjusted from 3¼ to 7 in. without a cam change.

Speed changes, winds per stroke, and changes in twist direction are easily made.

The machine is available with either single- or double-drive self-opening spindle brackets.

Weaving

(Continued from page 121)

Theiler Corp., Whitinsville, Mass. The rectangular-shaped eye in the new Slide-Tax heddle is said to give the warp yarn a larger surface on which to rest.

The strain exerted on the yarn in passing through the heddle is considerably reduced, and the Slide-Tex heddle takes up less space in a harness frame than other types of heddles, it is claimed.

The heddles are made of carbon steel, are very springy, and are provided with a double rust-protecting surface (copper and nickel plated).

Shuttle-Changing Loom Has Large Filling Package

A new non-automatic shuttle-changing rayon loom with a very large filling capacity has been developed by Butterworth & Dickinson Ltd., Burnley, Lancashire, England. The new loom is said to be suitable for weaving all standard lines of rayon goods and will produce nearly all types of goods with up to eight harnesses.

The shuttles used in the loom are about 17½ in. long by 2½ in. wide by 1¾ in.

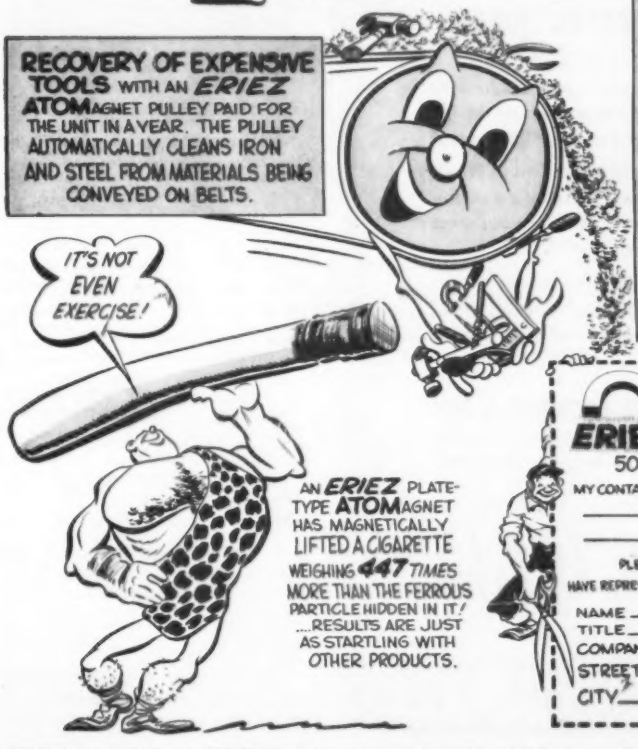
ERIEZ MAGNETIC ATTRACTIONS

ERIEZ MANUFACTURING CO., ERIE, PA., U.S.A. • PRODUCERS OF MAGNETIC SEPARATORS AND SELLERS OF (RCA) ELECTRONIC METAL DETECTORS

GETTING IRON OUT OF A GNAT'S EYE... IS DUCK SOUP FOR AN ERIEZ MICRO-MAGNETIC SEPARATOR. IT PULLS FINE IRON....DOWN TO 400 MESH ....OUT OF DRY POWDERS WITH UP TO 99% EFFICIENCY!

THE R.C.A. METAL DETECTOR, SOLD BY ERIEZ, IS AN ELECTRONIC WATCHDOG THAT SPOTS ANY KIND OF METAL IN ANY KIND OF NON-METALLIC MATERIAL OR PACKAGE. WARNS BY GONG OR LIGHT, OR REMOVES THE CONTAMINATED PACKAGE.... AUTOMATICALLY!

RECOVERY OF EXPENSIVE TOOLS WITH AN ERIEZ ATOMAGNET PULLEY PAID FOR THE UNIT IN A YEAR. THE PULLEY AUTOMATICALLY CLEANS IRON AND STEEL FROM MATERIALS BEING CONVEYED ON BELTS.



AN ERIEZ PLATE-TYPE ATOMAGNET HAS MAGNETICALLY LIFTED A CIGARETTE WEIGHING 447 TIMES MORE THAN THE FERROUS PARTICLE HIDDEN IN IT! ....RESULTS ARE JUST AS STARTLING WITH OTHER PRODUCTS.

ERIEZ MANUFACTURING COMPANY
501 EAST 12TH STREET, ERIE, PA.

MY CONTAMINATION OR SEPARATION PROBLEM IS:

PLEASE SEND LITERATURE ☐
HAVE REPRESENTATIVE CALL ☐ PROMPTLY ☐ WHEN IN AREA

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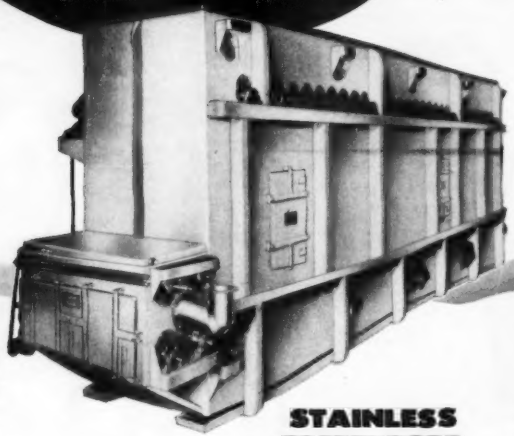
INVESTIGATE
Tower
TEXTILE EQUIPMENT



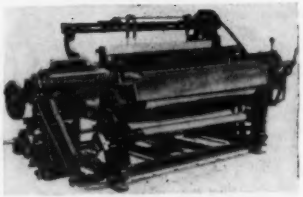
STAINLESS
STEEL AGER

The cost conscious textile man, concerned with the purchase and operation of production equipment, will find it to his advantage to contact Tower engineers. Tower engineers will consult with you on the design and installation of the finest in textile equipment — to meet your most exacting operational requirements.

Write for free booklet on Tower Textile Equipment

IRA L. GRIFFIN & SON
Charlotte 1, North Carolina
Southern Representative

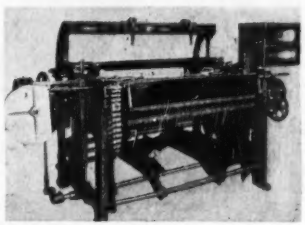
Tower Iron Works
Established 1835
50 BORDEN STREET, PROVIDENCE 3, RHODE ISLAND



A 9-IN. BOBBIN carried in a shuttle 17 in. long is used in this new non-automatic loom. One bobbin will run continuously for 45 min. making 46-in. cloth.

deep. The bobbins used are 9 in. long by 1¼ in. wound diameter. The loom is fitted with a two-shuttle drop-box motion at one side. A single bobbin of 140-den. filling will run continuously for 45 min. making cloth 46 in. wide at the reed space. With two shuttles working alternately every two picks and with the loom running at 140 picks per min., it will operate without filling replenishment for 1¾ hr.

British Shuttleless Loom Available in U. S.



THE "BATTERY" is filled once a day on this new British weaving machine.

Developed in England, a loom that does not use shuttles is available in the U. S. through John Marshall, Box 815, Fall River, Mass. The Gabler machine draws filling yarns from a one-day-supply bobbin at the side of the frame. An inserting hook carries the filling across. Since the hook is smaller than a shuttle, a smaller shed is required and the warp is subjected to less strain.

Strong vibrations and pulsating power requirements are said to be eliminated in the new machine. No shuttles, pickers, or leather parts are used.

Weaving Turbine Produces at 576 Ppm.

A new, square-shaped weaving turbine that weaves four fabrics, each up to 141 in. wide, at one time, has been developed by Pierce Vanlear, Le Cannet Rocheville (A.M.), France. Four straight-sided sections weave fabric vertically and get power from a central shaft.

Each section is a complete weaving unit and can weave fabrics independently of the other sections. Central-shaft speed

MAKE FINER, TIGHTER *Lace edgings*

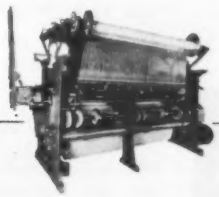
Cut production costs, too. With the *Kidde* Knitter five or six guide bars can be used to produce edgings of a quality much in demand today. Even on six guide bar work, production speeds of *160 courses per minute* or better are being maintained.

That rate of production is *substantially higher* than has ever been reached on this type of machine before—but it's *typical* of the high, *sustained* speeds attainable with the *Kidde* Knitter. Thanks to a new drum drive, a new motion on needle bars these speeds are possible—and the entire machine is designed to withstand them.

See for yourself how the *Kidde* Knitter is adaptable to practically any type of yarn, thread or elastic—how it is set up for simple or intricate patterns quickly and easily. We will be pleased to show you a machine in operation at our plant.

Use the Kidde Knitter to make these fabrics, too

Elastic Fabrics for corsets, girdles, brassieres. Dress Fabrics. Dish Cloth Materials. Curtains. Narrow Fabrics: edgings, braidings, laces. Shoe Cloth. Knitted Outerwear Fabrics for sweaters, polo shirts. Nets and veilings.



KIDDE MANUFACTURING CO., INC., BLOOMFIELD, N. J.

Kidde Knitter

Over 1,000,000 Spindles

EQUIPPED WITH REGNERY ADAPTERS

Because Your present spindles can be easily converted for sleeve type spinning.

Because The tried and proven conventional type of standard base, bolster and spindle with a wonderful record in many mills of 20 years or more of low cost operation and maintenance has a larger package and improved spinning with the Regnery Adapter.

Because Conventional spindles with Regnery Adapters balance out any other paper tube spinning in the mill.

Because A standard spinning bobbin can be used throughout the mill when filling spindles are converted with Regnery Adapters for use on a rewind operation.

THESE ARE THE ESTABLISHED FACTS!

1. More yarn per bobbin.
2. A smoother spinning unit.
3. Less ends down with better quality work.
4. Less waste in spooling operations.
5. A more uniform traverse.
6. A trouble-free, permanently "locked in" spindle and adapter.
7. A saving in doffing and spooling costs.
8. Lower bolster replacement costs.

LOWER YOUR PRODUCTION COSTS with REGNERY *ALUMINUM SPINDLE ADAPTERS*

Modern TOP drive adapters for the tapered or parallel bobbins can be installed in your mill quickly and easily to your specifications.

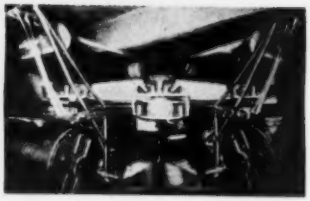
CONCENTRICITY IS OUR BUSINESS

Write for Descriptive Folder

F. L. REGNERY CORP.

Spindle Adapters · Production · Engineering

613 WEST 16TH STREET · CHICAGO 16, ILLINOIS

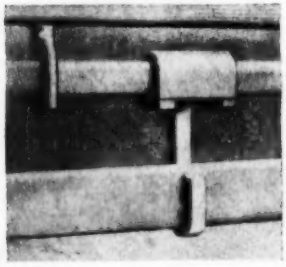


FOUR FABRICS of identical or varying constructions can be woven at the same time on this French weaving turbine. Filling is supplied by cones, and shuttles are centrifugally driven through a 1-in. shed.

is 6 rpm., but 24 picks are inserted during each revolution so that 144 picks are inserted in each of the four sections every minute.

The loom can weave fabrics requiring up to 16 harnesses. Twenty-four cams actuate shedding. Maximum shed size is about 1 in.

New Slide Hook Eliminates Warp Streaks



UNEVENLY DISTRIBUTED WARPS are self adjusting when a slide hook developed by Walker Mfg. Co., Atlantic & Ruth Sts., Philadelphia 34, Pa. is used. The free-riding hook is for silk-type frames. Frame and rod life are said to be increased with the new hook, which does not angle or bind. The hook is made of spring steel and is cadmium plated to prevent rust and resulting warp damage.

Rug Filler Cannot Be Untwisted

A new filler called Cellulon, for rugs, carpets, elastic webs, and the like, has been announced by Industria, Inc., 52 Broadway, New York 4, N. Y. The product, a cellulose extrusion that cannot be untwisted is made in Germany.

Loom Reed Has Rigidity And Light Weight

A new type of loom reed has been announced by Emmons Loom Harness Co. of Lawrence, Mass. and Charlotte, N. C.

The special RigidReed construction allows the ends of the dents to be held more securely by stronger aluminum or magnesium ribs. End bars riveted in place between each pair of ribs do not require reed caps. This arrangement allows ten-

Where quality is the first consideration

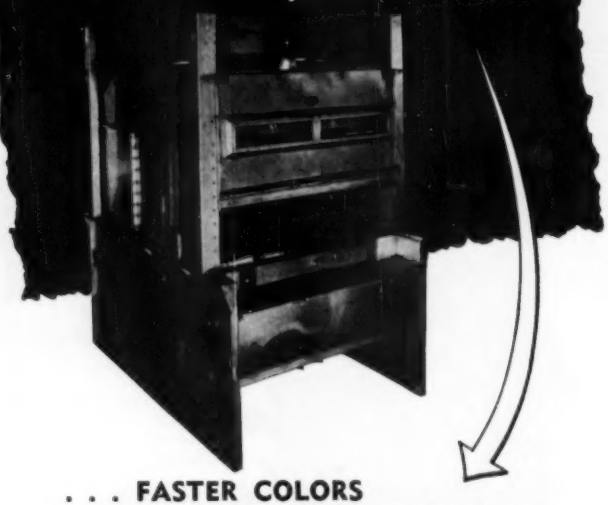
in a fabric there is no substitute for

A C E T A T E

the beauty fiber

Celanese CORPORATION OF AMERICA, New York 16

QUALITY DYEING
OF SYNTHETICS
AT HIGH
TEMPERATURES



. . . FASTER COLORS
. . . MAXIMUM PENETRATION
with the *new* Stainless Steel
GLASCO DYE BECK

Features of this new dye beck include:

1. Curved bottom tub in which the cloth is piled and upset evenly without tension. Curved bottom also saves dye liquor.
2. Optional recessed closed steam tube coil at the low point of the tub maintains required temperature of dye liquor without damage to the cloth. Only the dye liquor touches the coil.
3. Atmosphere above the dye liquor is maintained clear and at better than liquor temperature.
4. Positive color distribution over full length of the dye tub is obtained by means of a removable color trough with strainer and a quick color washing or spraying tube, and gravity flow within the trough.
5. Optional cross-over equipment within present enclosure for continuous dyeing with minimum cloth tension.

Write or phone for full particulars and demonstration.

GLASCO EQUIPMENT CORP.
Pioneer Fabricators of Stainless Steel Equipment
10 WAIT STREET — PATERSON 4, N. J.

GLASCO PRODUCTS

Massachusetts
Charles L. Niles Company,
Boston

North Carolina
Odell Mill Supply,
Greensboro

South Carolina
Greenville Textile Supply Co.
Greenville

sion to be given the selvage dents by peening the end bars.

No tubing, backstrips, or inside metal strips are required for additional strength. The new reeds may be soldered at the ends or used full length. They are available in standard ¼-in. and ⅜-in. rib sizes only. Dents may be either carbon or stainless steel.

Knitting

(*Continued from page 124*)

brilliance. Soft-spun cotton yarns have been used on the machine, and the product does not have the traditional argyle bulk, it is claimed.

Principal feature of this circular-knitting machine for making patterns in fabrics is in the introduction of two or more different colors at points immediately adjacent to each other on the needle circle.

Circular Knitting Machines Developed in France

Two new knitting machines have been announced by Lebocey Machines, 25 Plasteur Ave., Troyes, France.

The CL-61 is for 1x1 and 2x2 rib patterns and refinements; the CL1-61 is for interlock rib patterns.

Among the features of the machines are: automatic lubrication, electronic control, uniform take-up, pushbutton controls, and adjustable pulley-speeds.

Rapid adjustment of driving-belt tension is possible. A slow-motion drive permits observation of stitch formation and needle adjustment. Controls are located at four points on the machine.

Yarn feed is self-adjusting.

Uncurler for Loopless-Toe Hosiery Improves Quality

A new uncurler that has been specially designed for handling stockings seamed by the "loopless-toe" method is now being produced by Union Special Machine Co., Chicago, Ill.

The new uncurler, in addition to offering all the features of previous uncurlers, has been designed with a double-prong extension at its delivery end that enables the stocking to be carried farther into the feed cups than is usually possible.

While designed specifically to overcome the difficulties of seaming "loopless-toe" hosiery, the new uncurler works equally well for conventional-type looped hosiery.

Electronic Let-Off Eliminates Tricot Shade Marks

The first of two electronic let-off controls, newly developed by General Electric Co., Schenectady, N. Y., for tricot-knitting machines, has been installed at Van Raalte Co., Inc., Saratoga Springs, N. Y. The new device enables the mill to produce a better grade of knitted goods than

For more information, write direct or use Reader Service post card.

TOGETHER

a team increasing textile production

Textile men know that roller bearing spindles increase production, reduce power consumption, contribute to what is, overall, the most highly efficient possible spinning operation.

Knowing, too, that today it's pretty hard *not* to buy good bearings in all industries, why do textile production men usually specify SKF Spindles and Tension Pulleys?

Simply because by doing so, they get some other things along with the bearings. They get the *teamwork* of experienced, competent bearing engineers who know textile production, too. They get the teamwork of field men who *know* bearings and their applications. They get the expanding production facilities of efficient, up-to-date plants.

Whatever your product, your designers and engineers can have this helpful teamwork simply by asking for it.

7170

SKF
BALL AND ROLLER BEARINGS

8 REASONS WHY SKF IS PREFERRED BY ALL INDUSTRY

integrity • craftsmanship • metallurgy
tolerance control • surface finish • product uniformity
engineering service • field service

SKF INDUSTRIES, INC., PHILADELPHIA 32, PA.—*manufacturers of* SKF *and* HESS-BRIGHT *bearings.*

was possible with mechanical controls, according to Van Raalte engineers.

Designed to eliminate shade marks caused by short-time variations of yarn tension and to give better control over "runner" length, the let-off control will provide stopping without marks.

The principle of operation incorporated in the G-E design and the high sensitivity of the control are said to render it unaffected by the mechanical variations found in previously used brakes.

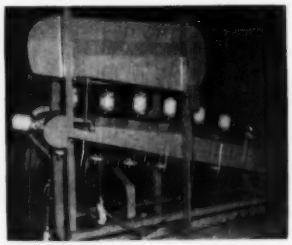
Dyeing and Finishing

(Continued from page 130)

erator, with the machine can shape at least 3,000 packages per hr.

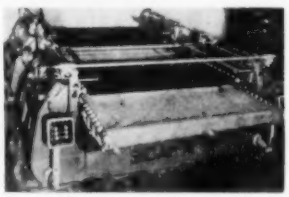
Besides shaping the square hard edges of the package, the machine progressively squeezes the entire package from both ends.

The machines are available for 1¼-lb packages wound on ⅝-in. or 1⅜-in. dye tubes. They are also available for 1¾-, 2-, and 2½-lb. packages wound on 1⅜-in. diameter dye tubes.



PACKAGES ARE SQUEEZED at the same time that the square edges are rounded in this new yarn-package shaper.

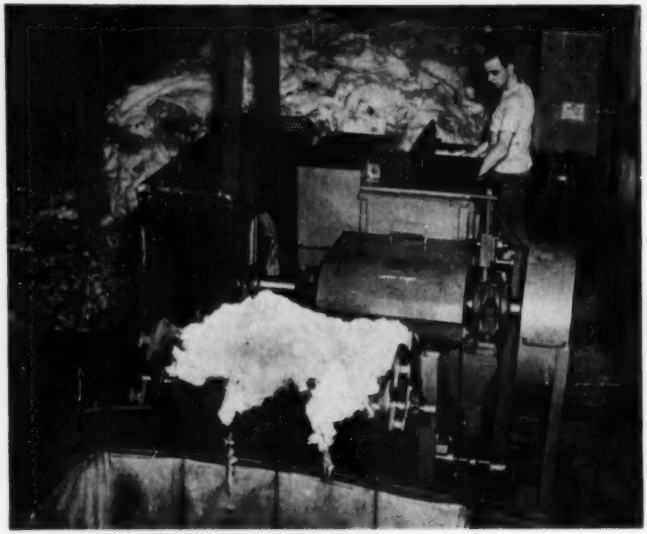
Italian Shrinking Machine Installed in Boston



A NEW MULTIROLL SHRINKING MACHINE that is said to be the basis of a new theory and process for felt-making has been announced by The Felters Co., Boston, Mass. The company installed the machine at a cost of about $70,000.

Shrinking Range Runs From 15 to 50 Yd. per Min.

A new London-type shrinking unit called the Unishrink continuous shrinking range has been developed by James Hunter Machine Co., North Adams, Mass. A horizontal conveyor carries the cloth



3 TYPICAL TAYLOR-STILES CUTTERS IN A SINGLE PLANT

In the plant of a leading commercial processor of textile waste three Taylor-Stiles cutters make it possible to cut several types of waste simultaneously.

Their No. 36 machine (above) is shown cutting nylon waste.

The No. 15 machine (center) is shown cutting sliver.

The "Giant Junior" machine (bottom) is cutting tops.

The "Giant Junior" was the first Taylor-Stiles fiber cutter purchased by this concern. Its versatility and efficiency led to the purchase of the larger volume cutters that now handle the very considerable and varied production of the plant.

TAYLOR-STILES and Company
CUTTING MACHINES & KNIVES

Send for description of the Taylor-Stiles cutter to meet your cutting requirements economically.

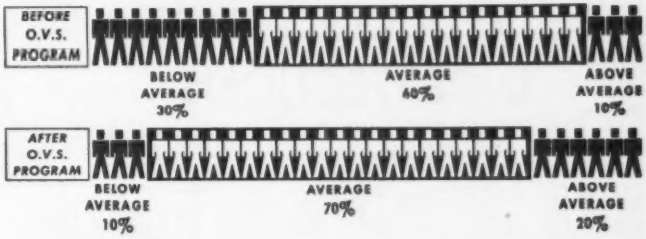
15 Bridge Street
Riegelsville, New Jersey

BAUSCH & LOMB

OCCUPATIONAL VISION SERVICE

Case History

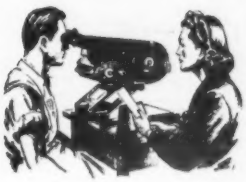
High Producers Among Winder Tenders *DOUBLED* at Rocky Mount Mills...



Writes John Scott, Jr. Personnel Director, Rocky Mount Mills, Rocky Mount, N. C.:* "The Bausch & Lomb Occupational Vision Service enabled us to identify visually inept applicants and, wherever possible, to direct current personnel to occupations where their visual performance measured up to that of the best operator on the job . . . winder tenders in our finishing department furnish a typical example. Before the program was started, income broke down like this: 30% below average, 60% average, 10% above average. But once a visual criterion was developed, substandard employees were referred to eye doctors for rehabilitation, and clinically subnormal employees directed to jobs where their vision was adequate. Now, low earners are 10%, average 70%, high 20%. Other departments followed suit. Result—increased production, employee satisfaction, product quality!"

**Reprint of Mr. Scott's complete article available on request.*

A PROVED METHOD *To Help Your Plant make money* 9 Ways!...



It's a matter of record that 4 of every ten industrial workers are visually unqualified for satisfactory performance on their jobs (established by the records of millions of visual performance tests of industrial workers in more than 4,000 different job categories). When visual skills are correlated to job requirements, working efficiency is notably increased. The Bausch & Lomb Occupational Vision Service is a scientific method for meeting this problem of "Eyes for the Job." *Employee participation is voluntary...and workers like the program.* Benefits which accrue in plants using O.V.S. (benefits which can accrue in *your plant,* too) include:

1. Improved quality of production
2. Increased production per worker
3. Reduced waste of materials and work rejects
4. Improved accident record
5. Reduced labor turnover
6. Lowered training cost
7. More effective placement
8. Reduced absenteeism
9. Improved employee relations

MAIL TODAY!

Send for the brochure "Eyes Right for the Job," which tells what the Bausch & Lomb Occupational Vision Service is, how easily it can be administered in your plant, and at what low cost.

BAUSCH & LOMB OPTICAL CO.
632-11 St. Paul St., Rochester 2, N. Y.

Please send me the brochure "Eyes Right for the Job," and complete details on the Bausch & Lomb Occupational Vision Service.

Name ..... Title .....

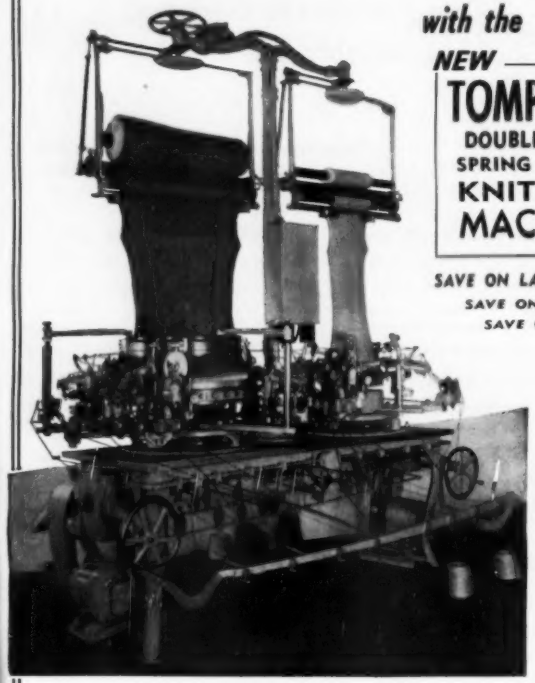
Company .....

Street ..... City ..... Zone ..... State .....

YOU CAN

SAVE ON WASTE
BY REDUCING CLOTH IMPERFECTIONS

with the NEW
TOMPKINS
DOUBLE HEAD
SPRING NEEDLE
KNITTING
MACHINE



SAVE ON LABOR!
SAVE ON WASTE!
SAVE ON NEEDLES!

• 8" to 35" CYLINDERS
• 5 to 50 GAGES

write for complete data and cloth samples

Cutting out imperfections from knitted cloth has always been time-consuming and costly. New stop motion and furnishing wheels on the TOMPKINS DOUBLE HEAD MACHINE provide knitters with a much welcomed solution! *Imperfections are caught before they get into the cloth!*

New five-speed individual drive motors for each head provide easy, quick changes. Stop motion is conveniently located below the table —with nothing in the operator's way for removing cylinders or take-up! You get new speed and new economy PLUS the versatility of fabrics (fine silk underwear to heavy overcoating) for which Tompkins machines have been world renowned since 1846!

TOMPKINS BROS. CO.
623 ONEIDA ST. SYRACUSE 4, N. Y., U. S. A.

ESTABLISHED 1846 . . . over a century of continuous service to the knitting industry throughout the world

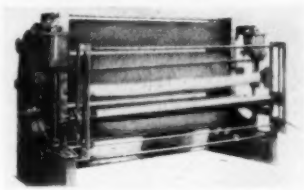
STEAM CONSUMPTION of this new shrinker is said to be less than half that required by previous units.

in a completely tensionless position. A patented airflow feature is designed to insure even drying.

Shrinkage of 4% to 10% is said to be obtained in the warp with minimum width shrinkage at continuous speeds from 15 to 50 yd. per min., depending on the weight of the fabric. The range can be operated by one man. Steam consumption for average production of 40 yd. per min. on 14 to 15 oz. worsteds is reported to be less than half of that previously used at speeds of less than 20 yd. per min..

New features also include Mecco guides for automatically guiding the cloth to the wetting-out tank. A special Hunter Leyland-Mycock expander removes all wrinkles and double edges before the cloth enters the squeeze rolls. A new-style rotary flock brush clears the top roll of flock.

Padder and Range Eliminate Rethreading



EITHER DOUBLE- OR SINGLE-STRAND processing can be accommodated on this 15-ton, 100-in. pneumatically loaded padder announced by Cook P & N Machine Co., Inc., 365 Dorchester Ave., Boston 27, Mass. No rethreading is said to be necessary when the unit is used as part of a complete, steam-dye range in which all units are designed like the padder.

Four-Box Washer

A washer designed especially for knitgoods processing and continuous knitgoods bleaching ranges has been developed by Rodney Hunt Machine Co., Orange, Mass.

Completely lacking in immersion rolls, the unit washes without tension. The fabric almost floats through the machine. Special doctors strip the fabric away from the squeezer rolls that operate at high speeds.

Needle in a Haystack?

With so many factors to consider, choosing the best location for your plant may seem an insuperable task.

It need not be. There is a "short cut" and a safe one. Here it is:

Take advantage of our experienced plant location service. Without cost or obligation, complete and authentic information will be furnished on locations best suited to your requirements.

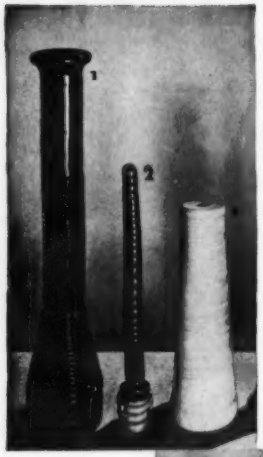
We have assisted many of the nation's outstanding companies in their plant location problems. We will gladly help you.

ADDRESS: Warren T. White, Assistant Vice President,
Seaboard Air Line Railroad,
Norfolk 10, Va.

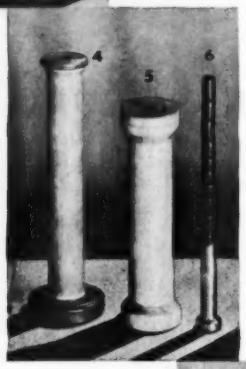
GROW with the GROWING SOUTHEAST!

SEABOARD AIR LINE RAILROAD

THROUGH THE HEART OF THE SOUTH

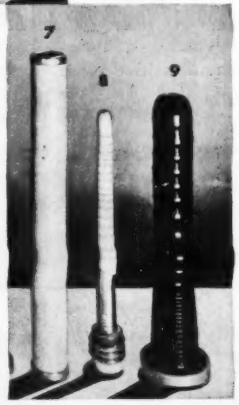


LOWELL
Bobbins, Cones
Rolls & Tubes



1 Ring spinning bobbin
2 Automatic loom bobbin
3 Winder cone
4 Worsted twister bobbin
5 Winder tube
6 Bobbin for non-automatic loom with electric feeler motion
7 Warp spinning tube
8 Automatic loom bobbin for electric feeler motion
9 Worsted spinning bobbin

Lowell bobbins, cones, rolls and tubes are made from maple, birch or beech wood, as required. All wood is thoroughly seasoned, air dried and properly cured in a modern dry kiln. Bobbins are finished with oil, lacquer, shellac or enamel *(baked on)* as specified. Inspection is rigid and only perfect products are passed for shipment.



MAY WE QUOTE ON YOUR REQUIREMENTS?

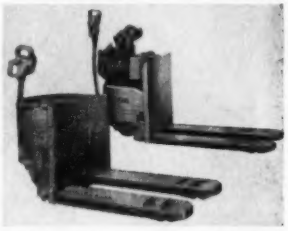
LOWELL SHUTTLE COMPANY
Established 1896 • Incorporated 1914
15 TANNER ST. LOWELL, MASS., U. S. A.
SALES REPRESENTATIVES
Hendrik Van Brederode, 311 Godwin Ave., Midland Park, N. J.; W. P. Russell, P. O. Box 778, Atlanta, Ga.; West Philadelphia Supply Co., Emerald and Somerset Sts., Philadelphia, Pa.; E. B. Smith, P. O. Box 3085, Greenville, S. C.

Materials Handling

(*Continued from page* 131)

Westport, Mass., to its line of textile-handling units of Fiberglas. This roving truck is of one-piece molded construction with a smooth inside finish. The truck needs no rivets, screws, or bolts in any part of its construction, is lightweight, tough, moisture proof, and impervious to oil, grease, and most chemicals. The trucks are three-fifths the weight of trucks made of conventional materials. They are available in five popular sizes and can be equipped with any style casters needed.

Hand Truck in Two Types Has New Features

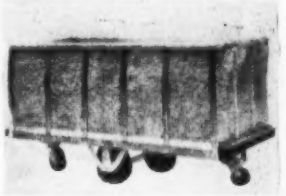


CAPACITIES of up to 6,000 lb. are available in either the battery-powered or gasoline-engine-powered model.

Hand trucks in two power types but of one basic design have been added to the line of materials-handling machines produced by Clark Equipment Co., Industrial Truck Div., Battle Creek, Mich.

One of the new trucks, the *Electro-Lift*, is battery-powered with motor drive; the other, the *Hydro-Lift*, is gasoline-engine-powered with hydraulic pump and motor drive. Each model, it is said, possesses certain definite advantages for particular handling operations.

Stainless-Steel Truck Designed for Dyehouses

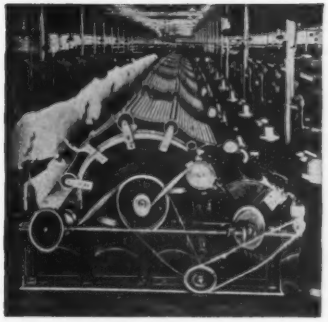


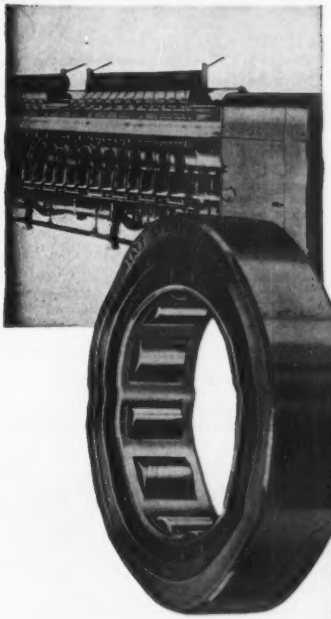
STAINLESS-STEEL TRUCK for use in dyeing and finishing plants is corrosion-resistant and easy to clean. Construction design also facilitates draining off of fluids.

Designed expressly for handling textiles in dyeing and finishing plants, a new stainless-steel truck has been offered by Market Forge Co., 48 Garvey St., Everett 49, Mass.

The bottom of the truck is higher in

Greater production plus *Greater* savings with HYATTS



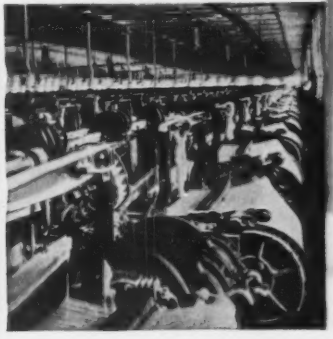


Modern, Hyatt-equipped textile machinery is producing more and better cloth at less cost.

How? Because with Hyatt Roller Bearings built in, faster operation is assured, power costs reduced and only infrequent lubrication required.

And another decided advantage of Hyatt-equipped looms, preparatory and finishing machinery is the cleaner yarn and cloth produced, because there is no leakage of grease or oil from these bearings.

When ordering new textile machinery specify *Hyatt Roller Bearings* for greater savings. Hyatt Bearings Division, General Motors Corporation, Harrison, New Jersey.



HYATT ROLLER BEARINGS

British craftsmanship at its finest

Mellor Bromley

INTERLOCK

KNITTING MACHINES

4RL SERIES INTERLOCK MACHINES BUILT WITH MULTIFEEDERS FOR CONTINUOUS INTERLOCK OR WITH AUTO-CHANGE FOR FANCY PATTERNED FABRICS.

The Mellor Bromley range of top-line machines covers most classes of underwear and outerwear fabrics and garments. Send for illustrated leaflets of the types in which you are interested.

Here are five of the principal plants of the Mellor Bromley group in England, employing some 3,000 workpeople—many with 25, 40 and 50 years service.

MELLOR BROMLEY & CO. LTD
LEICESTER · ENGLAND

the center than at the sides to facilitate flow of the draining fluid through the side openings.

Specifications of the unit are: capacity, 2,000 lb.; inside length, 72 in.; inside width, 36 in.; inside depth, 28 in.

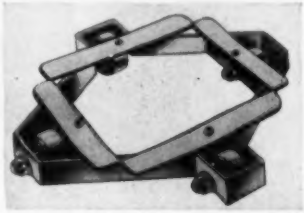
MOLDED-FIBERGLAS BOBBIN BOXES that have no rivets, screws, bolts, or wooden reinforcements have been developed by Westport Fiber Corp., Westport, Mass. The boxes, which are permanently colored, are available in five standard sizes and can be supplied for self-stacking or nesting.

Gasoline Trucks Improved for Use in Hazardous Areas

Spark-enclosed models of gasoline fork trucks have been announced by Yale & Towne Mfg. Co., 11,000 Roosevelt Blvd., Philadelphia 15, Pa. The new trucks, designated U. L. Type 68, are designed to give a high degree of safety even when they are used in gas- and dust-laden areas.

Maximum protection has been insured through shielding the electrical equipment against sparking; providing a water-type exhaust manifold and a water-cooled muffler; and using static-conductive tires.

Steel Truck Has Four Double-Ball-Bearing Wheels



"WEEL-EASI," an 18-in. square bogie truck, has been announced by Industrial Trucks Ltd., Essex Rd., London, England. The load can be turned in its own width and rides only 2½ in. above the ground.

CALCO dyelines

Advertisement
No. 22 of a series

PREPARED BY [illegible] COMPANY, CALCO CHEMICAL DIVISION,
STERLING DEPARTMENT, Bound Brook, New Jersey
[illegible]

Calcofast* Wool Dyes

Most acid dyes have some weakness or other when applied to wool. Either the light fastness is poor, or the wash fastness is inadequate, or some other property is lacking. Very few have sufficient all-around fastness for many uses.

Chrome dyes as a group offer good fastness, but are limited in their range of applications because of their rather poor leveling properties. Even then they lack the brilliancy of shade desired for many fabrics.

Calcofast Wool Dyes overcome many of the obstacles presented by these other types of dyes. A complete range of shades with good brightness can be obtained, while maintaining at the same time excellent standards in light, washing, perspiration and other important fastnesses.

New dyeing techniques have been developed by Calco so that the Calcofast Wool Dyes can be applied with a minimum amount of acid and at the same time produce solid level shades on either carbonized or uncarbonized wool stock, yarn or piece goods.

Calcofast Wool Dyes offer many advantages and should be investigated by every wool dyer. Ask your Calco Representative for information and samples.

*Trade-mark

Use of Sodium Nitrite in Vat Dye Baths for Yarn

Over a year of practical experience has shown that the addition of sodium nitrite to the dye bath is beneficial in many application processes for vat dyeing. This method is widely used for dyeing packages of yarn with dyes such as Calcoloid* Blue BLD Double Powder, at temperatures of 180° F and 190° F, to secure superior penetration and levelness. Another useful application of sodium nitrite is in dyeing long chain warps. Even at normal dyeing temperatures, the sodium leuco compound of many vat dyes is unstable when subjected to prolonged reduction conditions, and this effect is counteracted by the addition of sodium nitrite. In certain cases, the use of sodium nitrite and higher-than-normal temperatures improves the penetration and levelness of long chain warp dyeings. The addition of sodium nitrite to the dye bath is also useful in applying certain vat dyes on the beck.

*Trade-mark

Vat Dyes For Printing

Few people realize the many advancements and improvements which have been made in the vat printing pastes. A relatively short time ago problems of settling, poor printing properties, drying out, improper fixation and many others were prevalent. Even though they were troublesome, they were tolerated with the hope that improvements would be forthcoming.

All these problems have been under study for a considerable period of time, and one by one, improvements have been made which have reduced the troubles and variables in the print shop. Pastes have been developed which are non-settling, free-flowing, and which do not dry and flake on the sides of the drums. Compatibility with the average printing gums has been studied, and products with the best working properties have been developed.

The problems are not simple. Each dye, being of a different chemical and physical nature from the other, may not respond to the same treatments. Changes in the types of printing gums used by the printer further complicate the problem.

Few printers would now even consider using the vat printing types which were offered ten to fifteen years ago. Production and economy are too important.

Calco has pioneered in the development of better vat dyes for printing, processed to give best all-around performance. An excellent example of improvements incorporated in superior dyes is Calco's line of Hydron printing vats, especially the pinks, scarlets and oranges listed below.

Calcosol* Pink FFWP Paste
Calcosol Printing Scarlet 2BW Paste
Calcosol Printing Scarlet 3BW Paste
Calcosol Printing Scarlet 2GW Paste
Calcosol Printing Orange RYW Paste

Your Calco Representative will be glad to furnish further information and samples upon request concerning these and the many other Calco printing vat dyes.

*Trade-mark

For the Textile Bookshelf

Revision—Descriptive Index of Calco Technical Bulletins (Calco Technical Bulletin No. 761-A, New Second Edition). Abstracts all bulletins published to date; helpful cross-index to select bulletins pertaining to special problems.

During 1950 Calco used 116,900 board feet of long leaf yellow pine to maintain the presses in the Calco dye shops.

TEXTILE BANKING COMPANY

Inc.

Factoring Service

Puts your sales on a cash basis
Strengthens your cash position
Relieves you of credit losses

55 MADISON AVENUE • NEW YORK

Textile Accessories

(Continued from page 135)

heads are now made of steel instead of brass for greater strength and rigidity. Dust covers over the balance-control access holes will now open wider. Covers are also provided with tabs to assist in opening and afford easier access to the controls.

The orientation of screw-driver slots are arranged so that the position of the control is more easily determined. The terminal for the external ground connection is now permanently fastened. Provisions for air circulation around the chassis is altered to guard against the possibility of nuts falling through the ventilating openings.

Electronic changes have been made in the circuit of the cathode-delay capacitor. Oscillator coils are now accurately marked. An electronic change in the balance-meter circuit has been made to eliminate the high-voltage connections that were above the chassis.

All-Bakelite Bobbins Resist Repeated Steaming

A new all-Bakelite twister bobbin designed for high-speed operation has been developed by Allentown Bobbin Works, Allentown, Pa. It is reported that the bobbin can withstand frequent steaming without distortion or change in bore. The new Mack bobbin is made with a Bakelite barrel, head, and inset-molded Bakelite bushings and is said to eliminate completely the need for reboring.

The bobbins are manufactured in a wide range of diameters and wall thicknesses. Nearly a full year of actual mill testing has preceded the introduction of these bobbins, according to the company. No failures of these bobbins in service have been reported.

Compact Steam Cleaner For Looms and Frames

A new, compact, improved type machine cleaner has been developed by Livingston Engineering Co., 100 Grove St., Worcester, Mass. The new unit requires one-third less power than the previous model. The Speedylectric loom cleaner JC-20 can be plugged in at convenient locations in most mills without adding to present power lines.

When used on 550-v., 3-phase circuits, only 22 amps. are needed for maximum output. High pressure dry steam from the build-in boiler is delivered to the steam lance and, under finger-tip control of the operator, is directed at high velocity against the gears, cams, dobby heads, and frame of the loom to be cleaned. A concentrated solvent or detergent, either alone or atomized with the steam at the jet can be used to remove caked grease or waste accumulations.

Regular mill tests are said to show that one man can clean the dirtiest looms in 12 to 15 min. compared with a minimum of 45 min. for two men using ordinary

Tennant-maintained floors at Bates Mfg. Co., Lewiston, Me.

A typical example of results you can get with the...

TENNANT FLOOR MAINTENANCE SYSTEM

Transformed like magic, this 30-year-old floor —once dark, rough and spongy from scrubbing—is now good for another 30 years. Saved from costly, premature replacement, it's been made bright, smooth and durable again—by low-cost reconditioning with the TENNANT System.

RECONDITIONS your floors. Gets rid of dark, rough, oil-soaked fibers . . . provides a smooth, bright, new-wood surface.

HARDENS floor surface by special sealing process . . . fills, binds and toughens fibers to resist dirt penetration.

DRY CLEANS; ends scrubbing! Avoids muss, saves manhours, reduces accidents . . . assures cleaner floors at LESS COST!

YOUR FLOORS STAY CLEAN longer when dry-cleaned instead of scrubbed! With this Tennant Floor Machine, dirt, grime and traffic stains are whisked off and picked up in 1 operation. Leaves smooth, hard, dirt-resistant surface . . . only daily care needed is fast, easy sweeping with dry cotton mop. No muss; easy to use; keeps floors looking like new.

- Reduces floor cleaning costs.
- Makes floors easy to clean.
- Prolongs floor life, aids safety.

G. H. TENNANT CO.
2586 North 2nd Street
Minneapolis 11, Minnesota

Write today! Ask for "New Floors From Old" article; also "Textile Floor Maintenance" bulletin, etc.

TENNANT FLOOR MAINTENANCE System
Established 1870
OFFICES IN PRINCIPAL CITIES

For more information, write direct or use Reader Service post card.

MACK BOBBINS
ENGINEERED TO FIT YOUR NEEDS
ALL TYPES OF BOBBINS FOR FINE YARN PROCESSING
In the more than 60 years that Allentown Bobbin Works has served the fine goods industry, we have made literally thousands of different Mack Bobbins. They have been of all types and used all bobbin materials. Yet all have had one important thing in common. Each has been engineered for the specific job it had to do.
The Allentown Bobbin Works has complete facilities for the design and development of new bobbins. Careful inspection and thorough tests follow through every stage of manufacturing. Strength testing of materials and finished bobbins, continual check of dimensional tolerances, concentricity tests, vibrometer tests and Gisholt dynamic balancing, are included in Allentown's engineered manufacturing. Today more than ever before, Mack Bobbins are truly engineered to your individual requirements.
ALLENTOWN BOBBIN WORKS, INC.
ALLENTOWN PENNSYLVANIA

hand methods. The steam-detergent combination cleans thoroughly all parts inaccessible to ordinary methods of cleaning. A similar application of the steam cleaning can also be applied to the machines in the spinning mill.

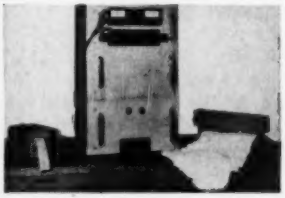
Regulating, etc.

(*Continued from page* 149)

control station without the necessity for coaxial wiring; manual pushbutton station; automatic cut in circuits; and fail-safe operation.

The sensing head contains all working parts except the relays and transformer. Two narrow beams of light project from the upper to the lower compartment through a slot in which the material moves. The beams are so located that the material normally intercepts one beam. If the material goes inward, intercepting both beams, correction takes place in one direction; outward movement, opening both beams, causes the opposite correction.

Radioactive Thickness Gauge Measures Sliver, Lap Irregularity



VARIATION IN WEIGHT per unit length of laps or sliver can be detected by the intensity of beta rays, which in turn can control devices to make adjustments to improve uniformity.

A new electronic device for measuring irregularities in spinning processes and at the same time for making corrections to processing machinery has been developed by Baldwin Instrument Co. Ltd., Brookland Works, Dartford, Kent, England. The machine, known as the beta thickness gauge, makes use of beta rays emitted from a radioactive material produced in atomic piles.

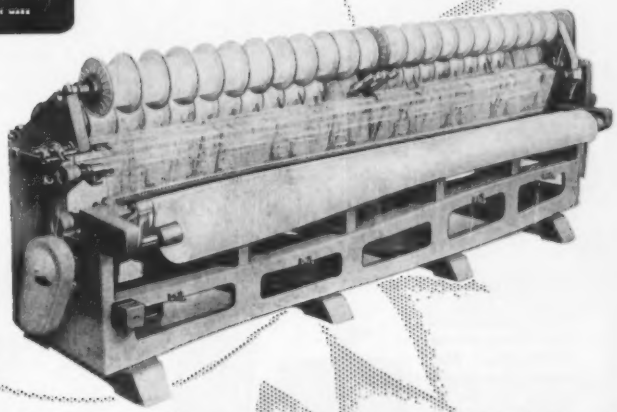
The material being processed passes between two chambers, one containing radioactive isotopes and the other an ionization chamber. A stream of electrons propelled from the isotopes passes through the material into the ionization chamber. By measuring the amount of radiation that emerges from the surface of the material, the thickness of the material can be determined.

Lineal-Measure Counter Gives Yardage Count

A new, model-TVR lineal Productimeter, with wheels designed in eighths for measuring cloth or yarn, has been

Newest tricot machine under the sun— opens a new era for the tricot industry!

MICRO



Mayer high speed warp-knitting-loom

latest in 168" machines

up to 30% increase in production!

DETAILS: 2 OR 3 GUIDE BARS
CUT-PRESSER-PATTERN BAR (OPTIONAL)
168" WIDTH, 22 TO 34 GAUGE

Self-contained frame construction for rigidity. Direct guide bar control. New machine drive principle for reducing stop marks. Sensitive yarn tensioning and warp control mechanism for uniform cloth quality. Lightweight aluminum leverage arms to speed-up knitting motions. Increased fabric take-up capacity, 21-inch beams. Many other improvements.

FOR DEMONSTRATION CONTACT:

Alfred HOFMANN & Co.
635 59th Street West New York, N. J.

NYC phone: LOngacre 5-5771 NJ Plant phone: UNion 3-1300

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It's Bemis for Tite-Fit Tubing, too

This versatile burlap tubing saves labor, time and material in packaging. The 2-way-stretch makes it fit almost any shape and a wide range of package sizes. Ask the Bemis Man about Bemis Tite-Fit Tubing.

Bemis

America's No. 1 Bag Maker and Burlap Importer

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LENGTH OF CLOTH or yarn can be measured accurately to ⅛ yd. and the length printed on various-sized cards.

developed by Durant Mfg. Co., 1929 N. Buffum St., Milwaukee 1, Wis. The printing counter may be used for lineal measurement on inspecting, finishing, folding, warping, beaming, and tentering machines.

The measuring counter is equipped with a clutch-control lever on the face of the counter to permit optional resetting with each print or printing multiple times without resetting the counter.

A special feature is a card-positioning guard that is adjustable to permit printing on various-sized cards.

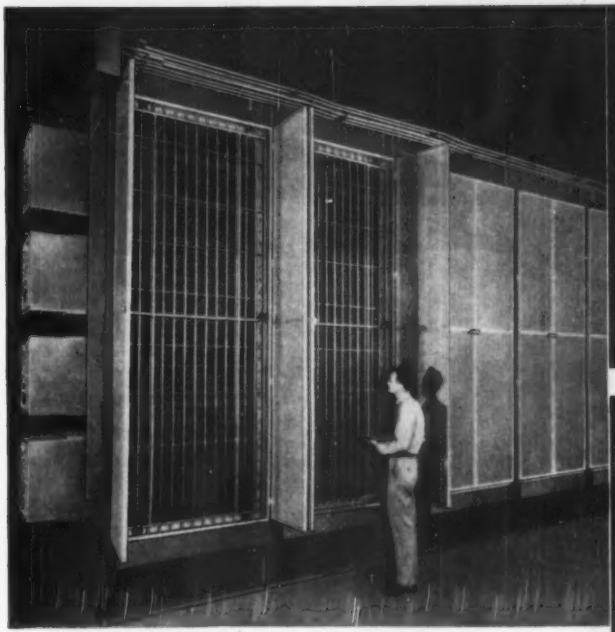
Power-Factor Meter Eliminates Line Cutting

TO OPERATE THIS POWER-FACTOR METER, the user merely clips the voltage leads to the potential source, clamps the hook around the conductor, and rotates the selector dial to obtain the proper reading. No complex connections or control settings are required.

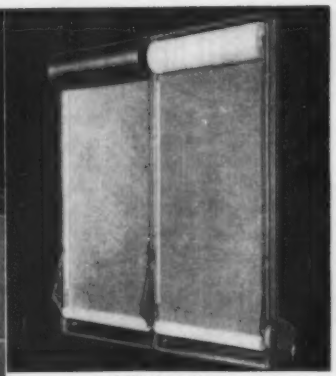
A new, hook-on, power-factor meter, which permits direct measurement of power factor without cutting conductors or interrupting electrical service, has been announced by the General Electric Co., Meter and Instrument Div., Schenectady 5, N. Y.

Newest of the G-E hook-on testing instruments, the Type AK-3 power-factor meter may be used on any balanced 3-phase circuit. It gives direct power-factor readings in circuits with voltages ranging from 100 to 600 v. and currents from 15 to 600 amp.

clean air costs less than dust!



AAF Electro-Matic



AAF Auto-Airmat

AAF Airmat Lint Arrester

clean air for textile processes...REDUCES OPERATING COSTS!

Specially Designed AAF Filters Improve Quality Control And Cut Maintenance Man-Hours

The best accountant in the business can't tell you the cost of lint and dust in textile manufacturing. But more than 100 mills and textile processors have found that *clean air* supplied by AAF filters is a profitable investment. These filters . . . specially designed for the textile industry . . . reduce rejects, fuel bills and maintenance costs . . . improve product quality control and employee efficiency. The AAF filters shown here have important case histories and are only three of a complete line of air cleaning equipment.

If you want advice on eliminating the cost of lint and dust from your operating statement, call your nearby AAF representative . . . or write to us for complete engineering details.

ELECTRO-MATIC — self-cleaning, electronic precipitator. Highest cleaning efficiency—from smoke to large air-borne material. Used extensively to supply *super-clean* air for thread drying, yarn dyeing and critical processes. Eliminates *shut-downs* and reduces maintenance "man-hours" to a minimum. Bulletin No. 250 F.

AUTO-AIRMAT — the only practical, automatic, self-cleaning lint filter. Widely used for efficiently collecting lint in return air of weaving and spinning rooms. Licks disposal problem, since lint load is contained within rerolled Airmat media. Bulletin No. 234.

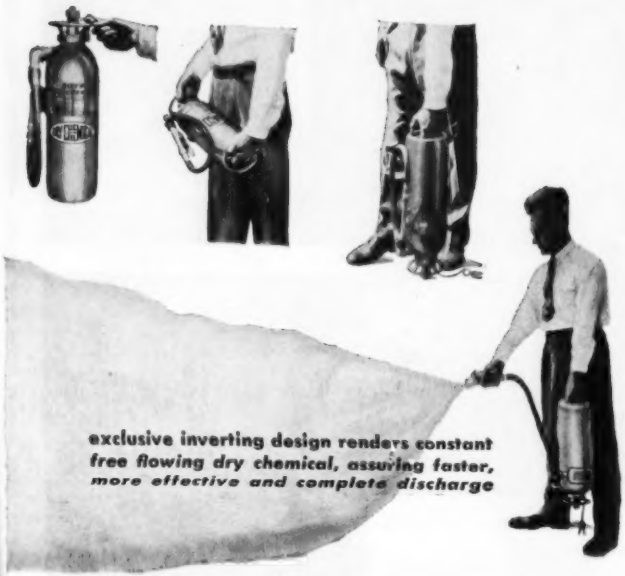
AIRMAT LINT ARRESTER — cleans air exhausted from picking and opening machines . . . to allow recirculation. Special design combines compactness and efficiency reducing space normally required for dust basements. Also simplifies installation and maintenance. Bulletin No. 281 B.

AAF **American Air Filter**
COMPANY, INC.

304 Central Avenue, Louisville 8, Kentucky • In Canada: Darling Bros., Ltd., Montreal, P. Q.

FEATURE FOR FEATURE...

DRY CHEMICAL **FIRE EXTINGUISHERS** *are your best buy!*


exclusive inverting design renders constant
free flowing dry chemical, assuring faster,
more effective and complete discharge

These fast, positive fire killers are easy to operate, compact, well-balanced and offer extensive maneuverability indoors or outdoors . . . no extra gadgets protruding or complicated operating parts. The outstanding mechanical breakage feature of C-O-TWO Dry Chemical Type Fire Extinguishers, plus continuous inert gas pressured agitation or fluffing, together with a skillfully blended free flowing dry chemical, guarantee lasting, foolproof fire protection. All sizes are rechargeable on-the-scene by anyone . . . no special tools required.

C-O-TWO Dry Chemical is a finely pulverized powder . . . non-conducting, non-corrosive, non-abrasive, non-freezing and non-toxic . . . special compound consists of sodium bicarbonate and other chemicals skillfully blended to render high fire extinguishing qualities, remain free flowing while being used and withstand long periods of storage without deterioration. When brought into contact with fire, C-O-TWO Dry Chemical absorbs a greater part of the heat, decomposes and releases fire killing gases. This heat absorption process acts as an insulating screen between the fire and the fire fighter.

Fully approved and built to rigid specifications . . . C-O-TWO Dry Chemical Type Fire Extinguishers are exceedingly effective on flammable liquid, gas and electrical fires, as well as surface fires involving ordinary combustible materials . . . rated by Underwriters' Laboratories, Inc. and Factory Mutual Laboratories for class B and C fires.

Convenient 4, 20 and 30 pound hand sizes . . . no syphon tubes or valves within the cylinder to become clogged or inoperative . . . discharge hose and squeeze type discharge nozzle remain empty until actuation takes place . . . one piece removable top assembly.

Also, convenient 150 pound wheeled size . . . sturdy, wide-faced wheels . . . discharge hose and two position discharge nozzle having soft or solid stream fully enclosed in protection casing . . . footrail and dual bar handle provide easy inverting.

Act now for complete free information on these top quality fire extinguishers. Remember . . . you can't put fire off . . . fire doesn't wait. Get all the pertinent facts . . . write today!

C-O-TWO FIRE EQUIPMENT COMPANY

NEWARK 1 • NEW JERSEY

Sales and Service in the Principal Cities of United States and Canada
Affiliated with Pyrene Manufacturing Company

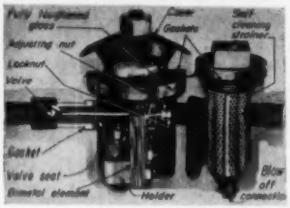
MANUFACTURERS OF APPROVED FIRE PROTECTION EQUIPMENT

Squeez-Grip Carbon Dioxide Type Fire Extinguishers • Dry Chemical Type Fire Extinguishers
Built-In High Pressure and Low Pressure Carbon Dioxide Type Fire Extinguishing Systems
Built-In Smoke and Heat Fire Detecting Systems

Air Conditioning, etc.

(Continued from page 157)

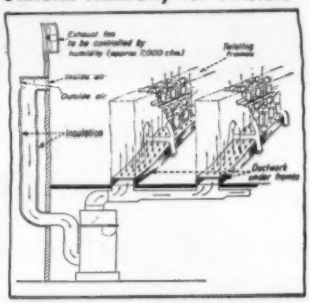
Steam Trap Combines Five Units in One



A NEW STEAM TRAP that combines a steam trap, air by-pass valve, check valve, strainer, and control glass all in one unit has been developed by Velan Engineering Co., 1216 Drummond St., Montreal, Canada. Use of the new trap eliminates the complicated piping required when the five units combined in this valve are used separately.

The new trap is made in one orifice size only—½-in.—but is said to discharge more than the average 1¼-in. trap. Advantages claimed for the new valve are quick warmup, more production because of the fast warmup, no air binding or steam locking, and use of less steam.

New System Aimed at Uniform Humidity for Twisters



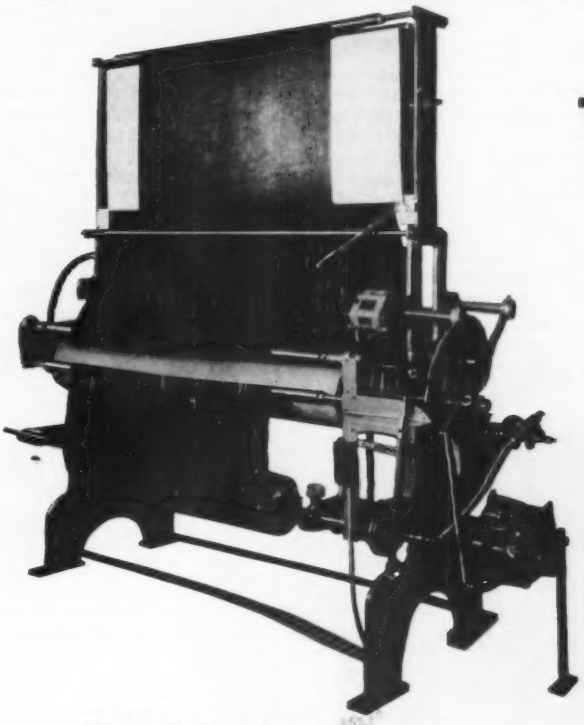
INSTALLATION OF FRAME-CONDITIONING can be from beneath the frame (as shown) or from above by separate air vents to each frame. Higher and more even relative humidities are possible with either system.

Frame-conditioning of textile machinery, expecially twisters, has been announced by Air-Perme-Ator Mfg. Co., Paterson 2, N. J. Humid, saturated air is circulated within a frame without interference from excessive heat accumulation from motors or spindles. Static is also said to be eliminated.

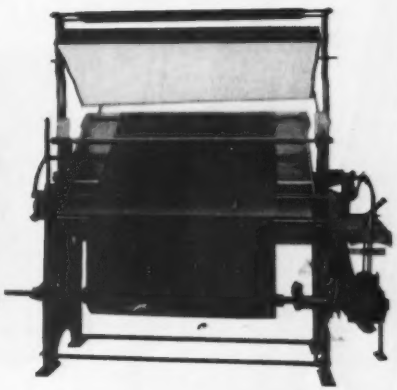
The unit operates under specific controls by permitting blending of the inside and outside air according to the wet- and dry-bulb temperature of the outside atmosphere. The controls are set so that when the temperature reaches the set-point, the exhaust fan begins removing the same amount of air that has been brought in and produces constant air changes. Special three-way controls, working independently are provided for the temperature and humidity.

During the heating season, or on cold days, warm water is supplied.

EVERYBODY WANTS TO SEE!



The Latest HINNEKENS EXAMINER



With all these improvements:

- ★ **Constant cloth speed**
- ★ **Positive light-screening inspection for gray goods**
- ★ **Shadow-free fluorescent illumination for finished goods**
- ★ **Automatic piece ticket stamping mechanism**

Available for your fall production requirements, the new Hinnekens Examiner can be ordered through the representative serving your area.

THE HINNEKENS MACHINE CO. INC. HM PATERSON N.J.

The HINNEKENS MACHINE CO., INC.

201 Godwin Ave. Paterson, N.J.

NEW ENGLAND REPRESENTATIVE	Peter Jaswell & Son 27 Brentwood Ave. Providence 8, R. I.
SOUTHERN REPRESENTATIVE	Lucas Associates, Inc. P. O. Box 1696 Charlotte 1, N. Carolina
MEXICO AND SOUTH AMERICA	Meyer, Lyra & Co. Inc. 227-229 Fulton St. New York, New York

LEVEL THE LOAD

WITH A TWIN DISC HYDRO-SHEAVE®

Do you know the simple and inexpensive way to solve starting load problems?

By installing a Twin Disc HYDRO-SHEAVE Drive on the output shaft of your electric motor.

Take a starting load as tough as this garnett machine, operating in a large North Carolina textile mill. This machine took *two to four minutes* to come up to full speed.

Frequent overloads *burned up several motors*—and that proved costly in time, money and materials.

A 10.6 Twin Disc HYDRO-SHEAVE Drive solved all this by permitting the motor to come up to maximum torque before picking up the load. If there was an overload, the hydraulic coupling in the HYDRO-SHEAVE "slipped."

Today, thanks to this hydraulic coupling package which can be installed right on the motor shaft in a few minutes, (1) there have been no more motor burn-ups, (2) shock loads between the motor and the machine have been eliminated and (3) the starting current demand load has been leveled.

On every machine that is hard to start, it will pay you *to level the load* with a Twin Disc HYDRO-SHEAVE Drive, the unit that saves your current, saves you money and saves your machinery wear and tear. Ask for Bulletin No. *145-B* for complete information.

This ready to install hydraulic coupling will solve your starting load problems . . . save motors, save current demand . . . as it has in hundreds of mills.

TWIN DISC
CLUTCHES AND HYDRAULIC DRIVES

TWIN DISC CLUTCH COMPANY, Racine, Wisconsin • HYDRAULIC DIVISION, Rockford, Illinois

BRANCHES: CLEVELAND • DALLAS • DETROIT • LOS ANGELES • NEWARK • NEW ORLEANS • SEATTLE • TULSA

Books of Interest

Card-Clothing Care Outlined from Britain

CARD GRINDING in Theory and Practice, by Dronsfield Brothers Ltd., Atlas Works, Oldham, England; cloth, 170 pages.

This latest edition of a British treatise on the maintenance of card clothing is well illustrated and indexed. The study of modern methods of card-clothing grinding includes descriptions of (1) the initial grinding by the manufacturer, (2) the applying of clothing to the card, (3) card grinding in the mill, (4) the grinding of auxiliary rolls, and (5) the stripping of cylinders and doffers and the stripping and burnishing of flats. The last chapter in the book concerns itself with general information on emery fillet, the care of grinders, and what the British call "wrinkles" (in TEXTILE WORLD lingo, "kinks") for carders and other grinder users.

Fabric Deterioration Discussed Chemically

MICROBIAL DECOMPOSITION OF CELLULOSE, by Ralph G. H. Siu; Reinhold Publishing Corp., 330 West 42nd St., New York; cloth, 531 pages, $10.

This book is a comprehensive collection of data dealing with fungus, bacteria, and mildew attacks on cotton fabrics. A clear picture is given in text, sketches, cross-sections, and graphs of the structure of cellulose; the biochemical mechanism of its decomposition; the physiology and manner of attachment of the microorganisms concerned; and the methods of preventing such deteriorative attacks by chemical modifications. Included in the text are heretofore unpublished data from military and other governmental laboratories, as well as previously inaccessible reports of field operations during and since World War II.

Management Techniques Broadly Summarized

TOP-MANAGEMENT ORGANIZATION AND CONTROL, by Paul E. Holden, Lounsbury S. Smith, and Hubert L. Smith; McGraw-Hill Book Co., 330 West 42nd Street, New York 18; cloth, 257 pages, $5.

Organization and control practices of a substantial number of industrial corporations are discussed in this book in an effort to discover what are considered the best techniques for the efficient functioning of top management. The report outlines how basic policies are best formed, how authority is effectively delegated, how con-

Taylor has a NEW ANSWER to

SQUEEZE ROLL PRESSURE

and other load measuring problems!

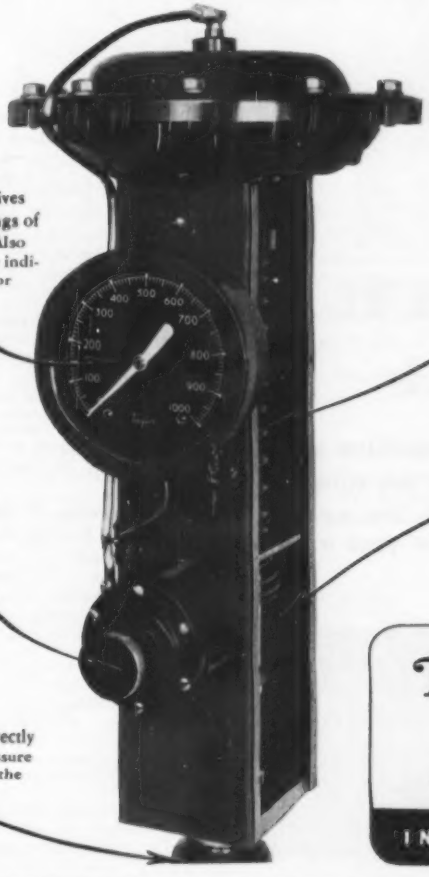
For the first time, you can know just how much pressure you have on both ends of your size box squeeze roll. Taylor's new Squeeze Roll Pressure Control measures and controls actual *pounds of pressure* applied *directly* to the roll . . . unaffected by friction or leaking air.

One unit is installed on each end of the roll. Each can apply up to 1000 pounds pressure, for a total pressure of 2000 pounds plus the weight of the roll.

For calender rolls, dye padder rolls, and other higher pressure applications, a similar unit is available with a 2500 pound capacity . . . to deliver up to 5000 pounds pressure plus the weight of the roll, when used in pairs.

Taylor Squeeze Roll Pressure Control has been thoroughly field tested in several textile mills, for over a year. It is a logical outgrowth of Taylor's development of the volumetric measuring principle for difficult tension and pressure measuring jobs. Units are available for pressures up to 200,000 pounds and tensions from 5,000 to 200,000 pounds.

For full details on Taylor's Squeeze Roll Pressure Control, or for help on any similar pressure control problem, write: Taylor Instrument Companies, Rochester, N. Y., or Toronto, Canada. *Instruments for indicating, recording and controlling temperature, pressure, humidity, flow and liquid level.*



1. Easy-to-read dial gives direct pressure readings of actual roll pressure. Also available with remote indicating or recording for panel use.

2. One knob adjusts *actual roll pressure.*

3. Unit is mounted directly over the journal. Pressure is applied directly to the roll.

4. Spring automatically raises roll when supply pressure is shut off.

5. Volumetric element—a Taylor development—measures pressure being applied directly to squeeze roll.

Taylor's Centennial
ACCURACY FIRST
SINCE 1851

Taylor Instruments
MEAN
ACCURACY FIRST
IN HOME AND INDUSTRY

DARNELL CASTERS

Always SWIVEL and ROLL

Made for light, medium and heavy-duty service, you are sure to find in the Darnell line the exact caster or wheel to meet your individual requirements.

DARNELL CORP. LTD., 60 WALKER ST., NEW YORK, N. Y.
LONG BEACH, CALIFORNIA, 36 N. CLINTON, CHICAGO, ILL.

Books of Interest (Continued)

trol is maintained, how departmental viewpoints are harmonized, how results are measured, how bad practices are corrected, and how waste is eliminated. Recognition is given to the fact that top-management problems are essentially the same, whether one is running a cotton mill or a bleachery, or even whether one is responsible for a knitting plant or a wood-working establishment.

Supervisory Problems Attacked Through Training

FOREMAN TRAINING in a Growing Enterprise, by A. Zaleznik; Harvard Business School, Soldiers Field, Boston 63, Mass.; cloth, 232 pages, $3.50.

Everyone knows the importance of the foreman or foremen in the smooth-running operation of any industrial plant. Professor Zaleznik in this study has focused his attention on the foreman as a company administrator, and then asks the question: What kind of help do supervisors need in the way of training for more effective action on the job? Intensive observations of a particular foreman, called "Tony" in the book, in an assembly-line operation give the reader helpful understanding of typical supervisory problems out on the job.

Basic Fundamentals On Controlling Quality

QUALITY-CONTROL HANDBOOK, edited by J. M. Juran, McGraw-Hill Book Co., 330 West 42nd St., New York 18, N. Y.; cloth, 800 pages, $10.

Better quality at lower cost in any industrial enterprise can be obtained through the practice of a few basic fundamentals. This handbook will serve as a manual and easy reference to those know-how principles that every manager should keep in mind. It is the work of several specialists; illustrative examples from actual cases and records are profuse. Fifteen sections cover the economics of quality control; how to organize for quality control; acceptance, control, and assurance of quality control; and applications to specific processes and products, including textiles.

Processing of Cotton From Seed to Fabric

COTTON from Field to Fabric, Fifth Edition, by National Cotton Council, P. O. Box 18, Memphis 1, Tenn.; paper, 47 pages, $3.25.

This shiny stiff-covered volume summarizes in its first 33 pages the story of cotton, from culture in the cotton field to finished cotton fabrics. Specifically, it describes how cotton is cultivated, harvested, graded, marketed, ginned, spun, woven, and finished. A short review of the history of cotton is also given.

The last 14 pages are given over to 111 samples of actual 1½x3-in. test swatches of the following types of fabrics: print-cloth, combed and fine carded, colored-yarn, napped, industrial and industrial-specialties,

MORE PROOF of Stienen Obermaier leadership

COMBINATION EXTRACTOR-DRIER*

Substantially reduces labor costs and cuts drying time in more than half.

The "Stienen-Obermaier" Combination High-Speed Extractor-Drier has been perfected after many years of practical research application and has been enthusiastically received by the entire trade. This new system of extracting and drying has cut the total drying time more than half over other systems and has proven a superior method to any other available for package drying. This Combination High-Speed Extractor-Drier can be utilized by even the smallest package dyer to great advantage.

The quick drying time means faster turnover of yarn in the dyehouse, eliminating bottlenecks, and cutting production time in half. This means half the required floor space and half the material carriers.

In actual operation, the material carrier is removed from the dyeing machine and placed in the extractor-drier. For average production, the entire operation is handled in this one machine requiring 1½ to 2 hours. For larger production, the same machine is used for extracting. Additional Port Driers are used to maintain the same high-speed drying results.

Submit your sample package to our laboratory and you shall receive exact data on your type of yarn.

The only complete laboratory unit made for sample dyeing, extracting and drying.
- **entirely electrically operated**
- **no steam required**

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EXCLUSIVE SALES AGENTS OF OUR ASSOCIATES
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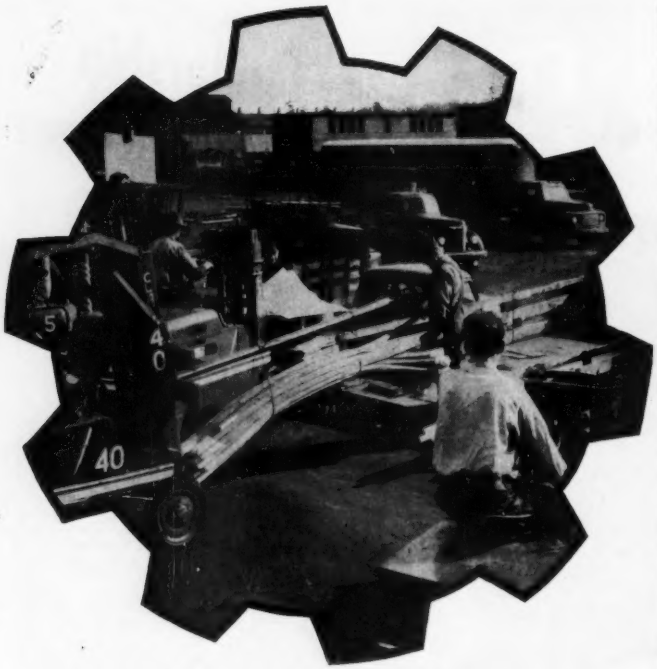


Geared to Today's Task of Supplying Warehouse Steel

Our biggest problem—like yours—is getting enough steel. And we—like you—are having a rough time. But we are doing all we can to get our fair share.

Our next job is seeing that you get your fair share. Distributing our products on an equitable basis presents no problem—simply a lot of work, which we are glad to do.

Suggesting suitable substitute steels, advising folks on availabilities, keeping up with latest government regulations—all are a part of the task we are geared to meet. Call us if we can help you.

Our Warehouse Division is guided by the same sound business principles which have carried the Atlantic Steel Company through fifty years of steady growth and progress.

50th ANNIVERSARY ATLANTIC STEEL COMPANY 1901-1951

Quality steel products since 1901 DIXISTEEL

WAREHOUSE DIVISION

Atlantic Steel Company

ATLANTA, GEORGIA • EMERSON 3451

Books of Interest (Continued)

household, pile, and special-finished fabrics. For reference purposes alone, the 111 swatches themselves are worth the price of the book.

New Editions Of Basic Annuals

NATIONAL FEDERATION OF TEXTILES Reviews Activities, Officers, Members, 1948, 1949, 1950; by National Federation of Textiles, Inc., 389 Fifth Ave., New York, N. Y., paper, 157 pages.

BULLETIN OF THE WOOL MANUFACTURERS, Vol. 80, 1950 Activities of the National Association of Wool Manufacturers and Statistics of the Industry; Natl. Assn. of Wool Mfrs., 386 Fourth Ave., New York, N. Y.

1951 TECHNICAL MANUAL AND YEAR BOOK of the American Association of Textile Chemists & Colorists, Vol. 27; Howes Publishing Co., 44 East 23rd St., New York, N. Y.

SKINNER'S COTTON TRADE DIRECTORY OF THE WORLD 1951, 27th Edition; Thomas Skinner & Co. (Publishers) Ltd., 111 Broadway, New York 6, N. Y.; and 44 Brazennose St., Manchester 2, England; $10 or £2.

Useful Accessories For Textile Mills

▶ **To request further information on any item, please use the card in the Reader-Service dept.; refer to the number at the end of the item concerned.**

Concrete Wall Sealer

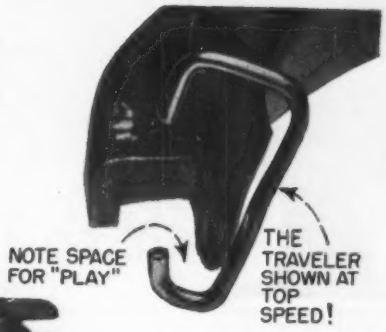
A new sealer for preventing water seepage in concrete walls has been announced by Flexrock Co., Filbert & Cuthbert W. of 36th St., Philadelphia 4, Pa. The manufacturer reports that a new stabilizing ingredient has been added to "Flextite" that speeds up action in sealing off leaks in concrete walls. The quicker action is also said to provide more thorough bonding and increased protection. The sealer is a liquid chemical to be mixed with cement, or cement and sand, to produce a mortar that is easily handled and fast-setting. (U-1)

Electric Heating Elements

A new, flat, sheathed electric heating element has been announced by Syntron Co., 825 Lexington Ave., Homer City, Pa. This new-type unit is designed for use with kettles, tanks, ovens, and dryers;

IT'S THE *(BANKED)* "Conical Track" that does it!

The "banked" track helps runners—they get best results because they're in THE RIGHT POSITION.



The conical shape of the HERR Ring helps at high speed too—the traveler rides outward and downward, on the top side and slanting side face—leaving the heel FREE, not anchored!

HERR CONICAL RINGS

Only the special design of the HERR Conical Ring leaves the high speed traveler with FREE "give and play" in the heel to compensate for yarn variations. Thus you get reduced breakage, smoother yarn, uniform bobbin density, less waste—in short, greater production at less cost, and remember, only HERR gives you the conical ring—ONLY HERR.

P. S. The Herr Conical Ring ALSO gives you better oil control. Special features insure cleaner fabric, less oil consumption, longer traveler life, no rewicking. TODAY yarn production counts as never before. Send for a Herr Representative and you'll GET IT.

Only HERR gives you the CONICAL RING

HERR *Manufacturing Co.*
INCORPORATED
318-320 FRANKLIN ST. BUFFALO 2, N. Y.

Control Costs with TOLEDO

On your scale material becomes money!

PRINTWEIGH STOPS ERRORS . . . Provides printed weight records—at the instant of weighing—assuring that the accurate indication of the Toledo dial will reach your accounting records without chance of human error.

Modern Toledos meet your needs today for *rapid, accurate* scales in all phases of production . . . to help you *control costs!*

These are the scales backed by Toledo's half-century of experience in Research and Engineering that has produced 80% of the major advances in scales during this time.

Toledo engineering has not only specialized in the direct design of weighing machine mechanisms, but also in the many associated fields such as electronics, plastics, metallurgy, optics.

Check your needs *now*—select Toledo equipment for vital jobs in guarding materials and costs! Sales and service in 200 cities. Toledo Scale Company, Toledo 1, Ohio. We will be very glad to send catalogs.

NEW!
FLOOR SCALES
New recessed frame design fully guards against foreign material lodging beneath platform edge—choice of full or semi frame, with economical conversion for future needs. Double parallel link platform suspension means long life, accurate dependability. Send for bulletin 2406C.

TOLEDO
HEADQUARTERS FOR SCALES

Useful Accessories (Continued)

and for immersion in liquids. Flat contact surfaces are provided for contact heating. There is a thin section for convection and airflow. The unit is of rugged construction and can be readily bent and formed into various shapes. The elements are said to be resistant to moisture, vibration, sparking, and arcing through the sheath. (U-2)

Mill Trackage System

A trackage system for moving heavy loads in the mill has been developed by Engineering Products Co., Inc., 122 South Michigan Ave., Chicago 3, Ill. The "Epco" system is designed to become part of the floor, and is not damaged by foot or truck traffic crossing it. Goods can be moved along straight trackage, turned on turntables to change direction, and run over a pivoted drawbridge connecting two loading platforms. Installations can be made to include a floor scale for weighing transported material before it goes to the store room. (U-3)

New Fork-Lift Trucks

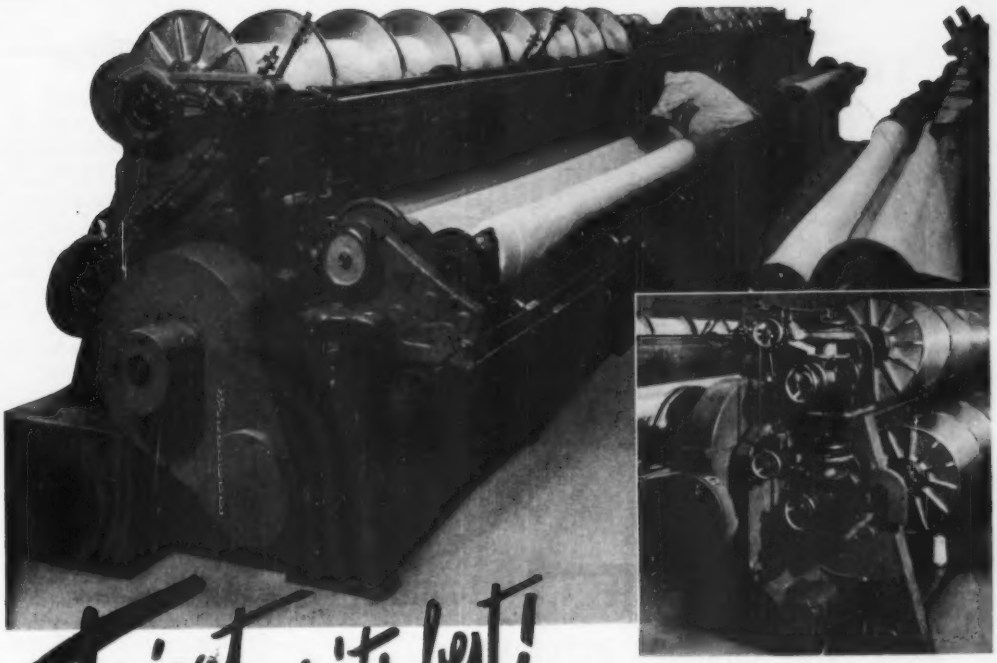
Five new models of Towmotor fork-lift trucks have been announced by Towmotor Corp., 1226 E. 152nd St., Cleveland 10, Ohio. Three of the new models, replacing three of the older models, have solid or cushion tires and a shorter wheelbase for easier handling. The two other new models have pneumatic tires on all wheels. Capacities of the new models vary from 2,000 to 4,000 lb. Wheelbases range from 39 to 48 in. The complete Towmotor line also includes three models equipped with pneumatic tires for safe trouble-free operation over rough terrain. (U-4)

New Spur-Gear Hoist

A newly designed spur-gear hoist in ½- and 1-ton capacities has been announced by Coffing Hoist Co., 800 Walter St., Danville, Ill. The "Challenger" unit, including a high-strength coil chain for an 8-ft. lift, weighs only 39½ lb. and is easily moved from place to place as needed. Strength and unusual resistance to shock-load breakage are said to be gained by the design and materials used in the construction. Every unit is tested at 100% overload, and is sealed to run in lubricant for a long time and with high efficiency. (U-5)

Rustproof Metal Treatment

Two-fold protection of iron and steel parts with a chemical treatment has been announced by Octagon Process, Inc., 15 Bank St., Staten Island 1, N. Y. The chemical, known as "Rustshield 2," is a phosphatizing compound said to change ordinary steel and iron surfaces to rustproof, highly absorbent non-metallic areas. This applied surface is a coating produced from chemical interaction of the phosphate solution and the metal surface. Metal parts so treated are claimed to remain properly lubricated far longer than smooth steel surfaces. (U-6)



Tricot at its best!

Quality control, ease, reliability and economy of operation are essentials of successful manufacture. The new Reiner Tricot Machine, in mill operation everywhere, easily meets all these requirements. Its automatic devices improve fabric quality and reduce stop and shade marks to a minimum. They assure a steady flow of flawless tricot cloth at top speed. Machine operation and care are made easier and yarn control more positive. Truly, here is *tricot at its best!*

Quality knitting is only possible with quality machines. For many years and in many mills Reiner equipment has proven to be of the superior quality class. Convince yourselves by inspecting this latest Reiner machine, in action, at the Reiner plants in Weehawken, New Jersey.

We also offer all types of Reiner Warpers and Creels—in short, warp knit equipment from cone to knitted fabric.

FEATURES:

- Automatic beam let-off transmission and warp tension adjuster.
- Automatic cloth take-up.
- Electro-mechanical brake clutch with needle-down disc to reduce stop marks.
- Instantaneous cam brake action.
- Motor power increased from 3 to 5 h.p. for quick level start.
- Automatic oil feed lines throughout.
- 2-bar units can readily be changed to 3-bar units by means of split cams.
- Automatic guide bar lift with safety controls to shut off power when guide bar is up.
- Completely enclosed cam shaft to eliminate oil splash.
- More space provided between beams.
- More space from floor to lower beams.
- New beam arrangement.
- Brake on one beam feed for special knit fabric.
- Adjustable presser bar holder.
- All gauges—Knitting width 168"—Available with long needles for coarse gauge fabrics.
- Pattern wheel or chain link drive.

FOUNDED IN 1903

ROBERT REINER INC.

559-564 GREGORY AVENUE
WEEHAWKEN, NEW JERSEY

10 MINUTES FROM TIMES SQUARE. Take Bus Nos. 61 or 67, from Platform No. 60, Port Authority Bus Terminal, 41st Street and 8th Avenue, New York City. Get off at Pleasant Avenue, Weehawken, New Jersey. From there turn left and walk through the underpass up to Gregory Avenue . . . TELEPHONE UNION 7-0502, 0503, 0504, and 0505. From New York City call LONGACRE 4-6882

TITAN automatic warp tying machine assures:

INCREASED PRODUCTION	Ties leased and/or unleased warp up to 108" wide in one operation.
HIGHER SPEEDS	Speeds tying of all types of warps —cotton, wool, worsted, rayon, silk, etc.
REDUCED BREAKAGE	End breakage is reduced and loom stoppage is minimized.
IMPROVED WARPS	It is dust free and clean.
VERSATILITY	Can be used for either stationary or portable tying or both.
ECONOMY	Quick changes by operator at reduced costs.
SIMPLE OPERATION	No special skill required by the operator.
VISIBLE TYING	Knots in sight at all times.
MILL PROVEN	Operating in many mills in U. S. and all six continents. In use for over 18 years.
PAYS FOR ITSELF	Increases trouble-free tying.

Send for descriptive literature and users' opinions.

EDDA INTERNATIONAL CORP.

468 FOURTH AVE., NEW YORK 16, N. Y. CALHOUN TOWERS, GREENVILLE, S. C.

U. S. General Sales Agents

Useful Accessories (Continued)

Steel Barrel Cradle

A light-weight all-steel barrel-cradle has been announced by General Scientific Equipment Co., 2700 W. Huntingdon St., Philadelphia 32, Pa. The GS steel cradle is designed for the storing and draining of drums and barrels and is said to be strong enough for extra-heavy loads. The all-steel unit is built for long life, and it is reported to reduce handling costs, labor, and time. A special loading bar is provided to permit the loading of drums and barrels with greater safety. (U-7)

Pointers for Supervisors

(*Continued from page 167*)

Make It Stick

The planning should be done with some insight into the types of information that are likely to be most fruitful in influencing employee attitudes. It has been found that the typical employee is more concerned about matters that directly affect him in his department and job than about matters that he considers remote—such as general company policies, competition, economic conditions, and the like. His conduct and output are apparently influenced more by his attitude toward his work situation and his department than by his general attitude toward the company.

It is obvious, then, that the employee should receive maximum information about those matters that, in his opinion, involve him directly. But the foreman can't neglect the broader matters of competition, economic conditions, etc. One reason these factors have not influenced employees may be that they have not been brought home to employees. The foreman can make them come alive for employees by relating them to the immediate work situation. The employee's stake in the company's well-being can be pointed out in connection with all sorts of other information the foreman passes on to employees—information on waste, efficiency, quality, work miles, etc., which the employee recognizes as being of direct concern to him.

Watch It Pay Off

The foreman can get help from staff departments and company-wide publications in getting the economic message across. But he has to follow up by relating it to the employee's work situation.

To sum up: The job is big. It requires planning. But it will pay off in employee attitudes that favorably influence output and conduct on the job.

Consider the SPEED

Camachine 26-3A operates smoothly at speeds up to 400 fpm depending upon characteristics of the material, number of cuts, web tension, and machine width.

Consider the ROLL QUALITY

Differential rewind assures uniformly wound rolls regardless of minor variations in caliper across the width of the web.

Consider the ECONOMY

Long years of trouble-free service are attested by the records. For example, a manufacturer of mica products reports 26 years of continuous satisfactory performance.

Consider the VERSATILITY

Camachine 26-3A handles many different types of plain and coated materials of varying caliper, including .002 acetate film and .020 insulating papers.

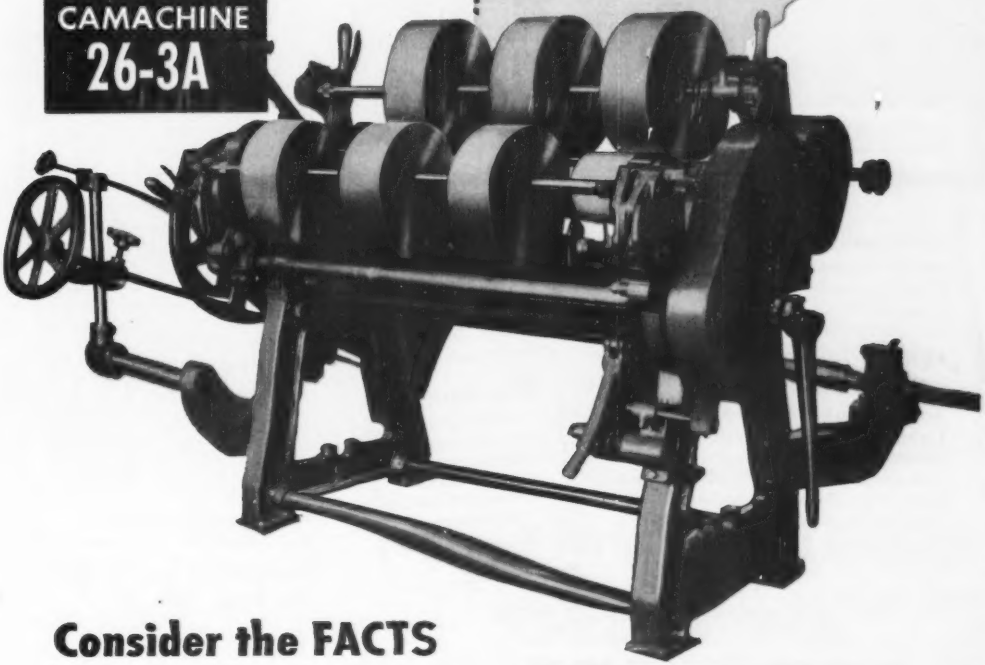
MODEL 26-3A slitter for coated or tacky materials

Speeds up to 400 fpm. Strips widths to 1" with Pneucut slitters, ½" with Integral type slitters, or ¼" with Special slitter units.

You are invited to consult with Camachine engineers regarding your roll production requirements. For complete information on Camachine 26-3A send for Bulletin 1010.

CAMERON MACHINE COMPANY
61 Poplar Street, Brooklyn 2, N. Y.

CAMACHINE 26-3A



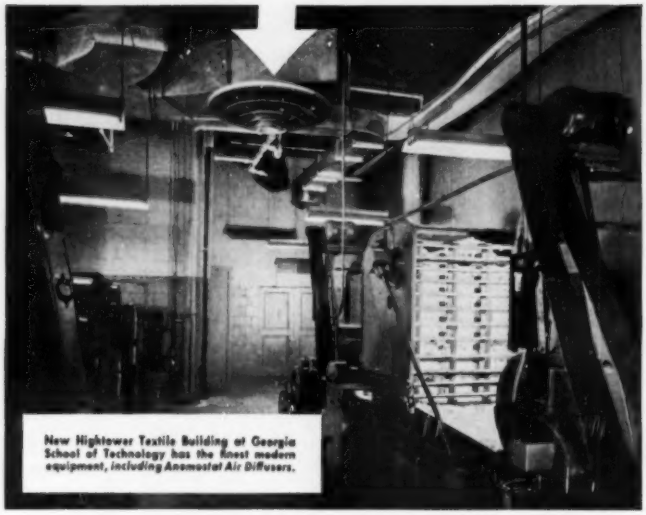
Consider the FACTS and you'll wind up with Camachines®

AA-847

for better fiber control...

ANEMOSTAT AIR DIFFUSERS

One of the most important factors in the quality control of fibers is putting the *right* quantity of properly conditioned air *exactly where* you need it.



New Hightower Textile Building at Georgia School of Technology has the finest modern equipment, including Anemostat Air Diffusers.

Scientifically designed Anemostat Air Diffusers accomplish this by distributing any volume of cooled or heated air in predetermined patterns . . . *without drafts.* Anemostats equalize temperature within the occupancy zone to plus or minus one degree and equalize relative humidity as well.

You can also use Anemostat Air Diffusers for spot cooling to neutralize machine heat loads. They are adaptable, too, to zone control of special areas. Anemostat's wide range of designs—including adjustable diffusers—assure flexible and perfectly balanced installations.

SPECIAL BULLETIN 32 tells the full story on the application of **ANEMOSTAT AIR DIFFUSERS** to textile manufacturing and processing. Write for your copy.

ANEMOSTAT®

DRAFTLESS *Aspirating* AIR DIFFUSERS

ANEMOSTAT CORPORATION OF AMERICA
10 EAST 39th STREET, NEW YORK 16, N. Y.
REPRESENTATIVES IN PRINCIPAL CITIES

"NO AIR CONDITIONING SYSTEM IS BETTER THAN ITS AIR DISTRIBUTION" AC-1254

Mill Maintenance

How To Check for Trouble If Motors Run Too Hot

If a motor gets up to speed but runs too hot, the cause may be under or over voltage; poor ventilation; overload; or a faulty coupling, centrifugal switch, or starting relay. Benjamin Hantman, works engineer, Motor and Control Div., Westinghouse Electric Corp., suggests this check list:

1. Measure the motor winding temperature with a thermometer. Stick a piece of clay or chewing gum on the bulb end before you insert it in the stator winding to get an accurate reading. The temperature should not exceed 194° F. (90° C.).
2. Measure the ambient or enclosure temperature with a thermometer. Ambient temperature should not exceed 104° F. (40° C.)
3. Check ventilation of motor enclosure to see that the openings are not clogged with dirt or lint. Look for other obstructions.
4. Check motor itself to make sure that it is not fouled with dirt.
5. Check the line voltage to see that it is within 10% of the rated value. If it is a three-phase motor, check all three phases.
6. Check the motor current against name-plate current to see if the motor is overloaded.
7. Check the line of the motor and its load. Misalignment causes added motor load as well as rapid wear of couplings or belts.
8. Check for proper operation of starting elements. Make sure the motor isn't "cycling" (repeated frequent starts) because of faulty control-circuit operation. Be sure centrifugal switches or starting switches of single-phase a.c. motors and starting mechanisms of repulsion and d. c. motors are working properly.

Answers to Textile Quiz On Page 190

1. **a.** [TW, Sept., '51, p. 4]
2. **b.** [TW, Sept., '51, p. 105]
3. **d.** [TW, Sept., '51, p. 105]
4. **d.** [TW, Sept., '51, p. 166]
5. **b.** [TW, Sept., '51, p. 141]
6. **c.** [TW, Sept., '51, p. 168]
7. **b.** [TW, Sept., '51, p. 176]
8. **a.** [TW, Sept., '51, p. 208]
9. **c.** [TW, Sept., '51, p. 254]
10. **d.** [TW, Sept., '51, p. 151]

USTER Tying Speeds Production on Vital Wool and Worsted

- Cuts Loom Down-Time
- Ties Entire Warp at One "Bite"
- Saves 30% to 70% on Tying Time
- Ties 250 to 350 Knots per Minute
- Saves 20% to 35% Tying Labor

In Action at Cyril Johnson Woolen Company

The Uster Frame fits directly over the loom beam—an important feature when space is cramped.

Tied ends are completely visible and accessible—an exclusive feature.

Cyril Johnson Woolen Company says, "We weave carded wool having a count of 3¼ to 10. Sley varies from 40 to 130. Our most usual count is 6 . . . sley 80. Number of ends per warp varies from 2,900 to 8,000.

"The Uster does all that has been claimed for it. We find it especially valuable in tying of samples. Why, on samples alone it enabled us to save four sets of harness, 9 hours drawing-in time, and 3½ hours loom down-time."

- **Ties the entire warp at one "bite"**
- **Precision Mechanism of unmatched speed**
- **Compact—Convenient—Versatile**

In Canada: HUGH WILLIAMS & CO., 47 Colborne Street, Toronto, Ontario

USTER CORPORATION • 2516 Wilkinson Blvd., Charlotte, N. C.

Sales Offices: Boston—Philadelphia—Atlanta

STEEL

Every Kind

Some steel products are in short supply but over-all stocks are still large, diversified

Plates, Structurals, Bars, Sheets, Tubes, etc. . . . Carbon, Alloy and Stainless Steels . . . .

RYERSON

Joseph T. Ryerson & Son, Inc. Plants: New York, Boston, Philadelphia, Detroit, Cincinnati, Cleveland, Pittsburgh, Buffalo, Chicago, Milwaukee, St. Louis, Los Angeles, San Francisco

NON-FLUID OIL

TRADE MARK — REGISTERED

Keeps Comb-Boxes Cool

In comb-boxes, as well as most other machinery, heat is usually the first sign of wear. NON-FLUID OIL does not "gum up" in comb-boxes as do so-called semi-fluid oils or thin grease substitutes. Drip-less, waste-less NON-FLUID OIL keeps boxes cooler, lasts longer and saves card clothing from damage.

We are prepared to furnish mills with skilled engineering service. Write for Bulletin T5-TW and free testing sample of NON-FLUID OIL.

NEW YORK & NEW JERSEY LUBRICANT CO.
292 Madison Ave., New York 17, N. Y.
Works: Newark, N. J.

SOUTHERN DISTRICT MANAGER: Falls L. Thomason, Charlotte, N. C.

55th ANNIVERSARY NON-FLUID OIL

WAREHOUSES: Atlanta, Ga.—Birmingham, Ala.—Charlotte, N. C.—Chicago, Ill.—Columbus, Ga.—Detroit, Mich.—Greensboro, N. C.—Greenville, S. C.—Providence, R. I.—St. Louis, Mo.

DON'T YOU BELIEVE IT! If anyone approaches you with products they swear to be exact imitations of NON-FLUID OIL, at a lower price, don't you believe it! The basic factors in all industrial production preclude paying a little and getting a lot . . . Remember, you only get what you pay for!

NON-FLUID OIL is not the name of a general class of lubricants, but is a specific product of our manufacture. So-called grease imitations of NON-FLUID OIL often prove dangerous and costly to use.

Textile Equipment News

(Continued from page 182)

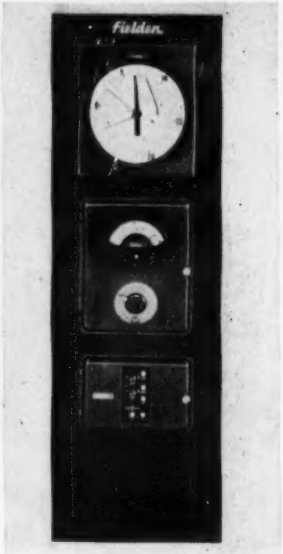
The new Weathermakers are of the horizontal blowthrough type. Damper control for separate zones is provided through a double-outlet arrangement, with one outlet supplying cooled and dehumidified air and the other supplying warm air. These twin outlets are divided into separate dampering compartments.

An independently operated double damper in each twin compartment regulates the proportion of warm and cool air for the zone, shutting down on the supply of one as the other is increased.

Although normally mounted on the unit, the entire damper section can be set up in a location remote from the Weathermaker by installing warm and cool air ducts to the damper.

The damper section may also be eliminated and double ducts—each pair equipped with their own damper—may be run to each conditioned space.

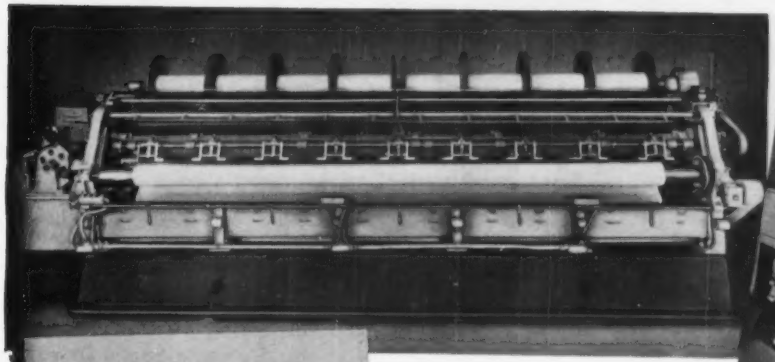
Drying Control Equipment For Slashers, Dryers



$1,250 BUYS THIS CONTROL, including recorder, timing panel, tachometer, and control relay.

New automatic control equipment for the Drimeter has been announced by Fielden Instrument Corp., 2920 No. 4th St., Philadelphia 33, Pa. The equipment provides a continuous indication and record of the moisture

You'll hit new production records with the Kidde-Aveco Tricot Machine!



Left end of machine showing enclosed gear box, pattern mechanism, motor and the controls.

Right end showing continuous let-down and take-up.

CHECK THESE FEATURES:

New Continuous Let-Down
Easy to set and maintain because it's mechanical. Eliminates shade marks, reduces stop marks and improves fabric quality.

New Variable Speed Drive
A turn of a hand wheel varies machine speed. No chain drive . . . no gears to be changed . . . quieter operation. Tachometer included.

New Continuous Take-up
Quality is established by a simple turn of adjustment screw. No gears or sprockets to be changed. No clutch. Once set, it requires no adjustment.

Other Features
These include improved plunger design, improved front guide bar lifting mechanism, quick-stop and jogging control.

NEW KIDDE-AVECO IS A HIGH POUNDAGE PRODUCER

The new Kidde-Aveco Tricot combines the essentials for large production... high operating speed with high efficiency. Speeds up to 450 courses, depending upon the pattern and yarn, are practical and are being maintained in mills today.

Equally important, the Kidde-Aveco Machine has acquired a reputation for low needle breakage. The press action is gentle and the needle life is better than usual. This means fewer defects and less down time. Other factors contributing to efficiency are enclosed cams running in oil... a one-piece cast girder that maintains machine alignment... and the rugged one-piece base... all exclusive Kidde-Aveco features.

Either to replace old machines or to increase capacity, the Kidde-Aveco is worth investigating. May we send you complete information?

KIDDE MANUFACTURING CO., INC., BLOOMFIELD, NEW JERSEY

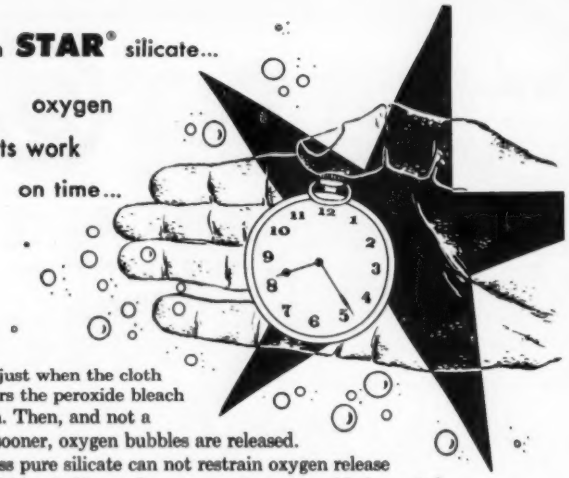
Kidde-Aveco
FOR TOP-QUALITY FABRICS

with **STAR**® silicate...

oxygen

starts work

on time...



. . . just when the cloth enters the peroxide bleach bath. Then, and not a bit sooner, oxygen bubbles are released. A less pure silicate can not restrain oxygen release until bleachable goods are present, so peroxide is wasted.

Star is sparkling bright, pure as it looks. It is specially processed to remove such impurities that might waste peroxide and also tender the cloth. Place a trial order now.

Philadelphia Quartz Co., 1139 Public Ledger Bldg. Philadelphia 6, Pa.

120th Anniversary—1831 PQ 1951

PQ SILICATES OF SODA

TO CHECK RELATIVE HUMIDITY REMEMBER

Bendix *Friez* MAKES the RIGHT INSTRUMENT at the RIGHT PRICE for EVERY JOB!

Model 185 Hygrodial
Precision Humidity and Temperature Indicator
Hair-operated and calibrated to professional standards of accuracy by the maker of the world's finest weather instruments. Handsome, modern case—4" high, 5½" wide, 1⅝" deep.

Model HA/2
Hand Aspirated Psychrometer
Accurate readings obtainable without special skill. Psychrometric readings can be taken at any point desired however inaccessible.

Model 160
Portable Humidity and Temperature Recorder
3" x 5" charts, 10 or 30 hour records. Modern design...handy for small space and difficult locations . . . built to meet unusual conditions.

Model 594
Hygrothermograph
The foremost relative humidity recorder for laboratory, factory, and office use. Scientifically designed for accuracy and dependability.

Model 573
Motor Aspirated Psychrometer
Designed to determine wet and dry bulb temperature with laboratory accuracy—Motors supplied for use on 115 V., 50 cycles or 60 cycles.

Model S/1
Pocket Sling Psychrometer
A small, low cost instrument. Thermometers graduated in 1° increments from +35° F to +110° F. Furnished complete with case and psychometric slide rule.

Model 550
Sling Psychrometer
Manufactured to U. S. Weather bureau specifications. Thermometers graduated in 1° increments from −20° F to +120° F, or −35° C to +49° C.

FRIEZ INSTRUMENT
DIVISION OF
Bendix AVIATION CORPORATION
1418 Taylor Avenue
Baltimore 4, Maryland
Export Sales: Bendix International Division, 72 Fifth Avenue, New York 11, N. Y.

content in warp or cloth and automatically controls the slasher or dryer to correct any deviation from the desired moisture content.

The equipment may be used on any type of slasher or fabric dryer.

Wet seams or momentary wet patches are ignored by the control. Corrections proportional to the deviation are made at time intervals that are automatically adjusted to suit machine speed.

Close control of moisture content —usually within ± 1¼% without hunting—is provided for any weight of warp or cloth at any machine speed.

Pushbuttons for manual control are provided on the instrument panel and may also be installed elsewhere. Pilot lights indicate when moisture is within limits, too high or too low, and when a correction is being made.

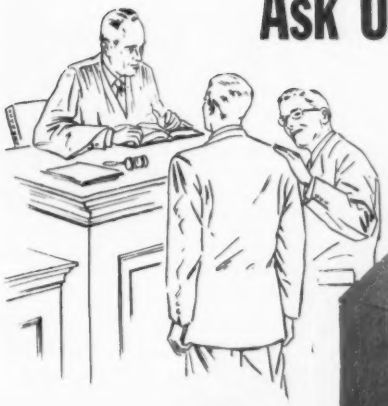
Inspecting Machine Has Variable-Speed Drive

TWO LIGHT BOXES, one vertical and one horizontal, help insure that no defects in cloth are overlooked.

An important feature of a new measuring and inspecting machine, developed by Hermas Machine Co., Hawthorne, N.J., is a new variable-speed drive with a 6-to-1 ratio. This drive makes it possible to run at a speed as low as 17 yd. per min., or at any speed up to 150 yd. or over, with infinite gradations of speed between these speeds. A conveniently placed lever gives fast, flexible control.

An entirely new type of back-lighting box for fluorescent lights is another feature of this new measuring and inspecting machine. A vertical back-lighting box contains the fluorescent tubes so placed behind a special plastic sheet as to give perfect diffusion of the light. Misleading bar effects, from

Ask US for the Evidence...



WE'LL PROVE THAT THE FiberMeter® AUTOMATIC BLENDING SYSTEM

Will pay for itself in 9 to 24 months.

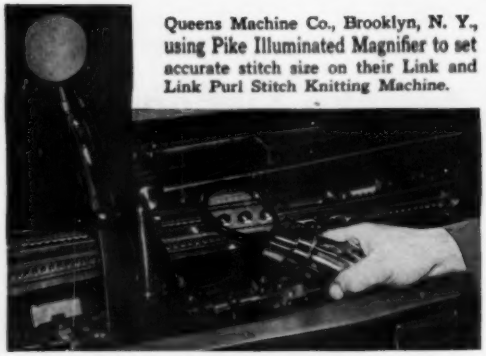
Will limit blend variation to a *maximum* of ± 1%.

Will make possible the production of cross dyed fabrics with no filling bands due to inaccurate blending.

• Such results may seem unbelievable. But they represent actual production line experience with Fiber Meter Automatic Blending in nearly 50 mills. This experience proves that the Fiber Meter System can cut your costs substantially and give you uniform blends of synthetics, cotton or wool to a high degree of accuracy not possible with any other method. We'll gladly submit the evidence and survey your blending requirements without obligation.

Write for our new brochure telling of the latest Fiber Meter developments including the new 24" unit for the scientific utilization of reworkable waste.

TEXTILE EQUIPMENT CORPORATION
SUBSIDIARY OF W. D. DODENHOFF CO., INC.
GREENVILLE, SOUTH CAROLINA



Queens Machine Co., Brooklyn, N. Y., using Pike Illuminated Magnifier to set accurate stitch size on their Link and Link Purl Stitch Knitting Machine.

ELIMINATE "GUESS WORK"!

USE THE PIKE ILLUMINATED MAGNIFIER TO SET ACCURATE STITCH SIZE

Advantages to Machine Manufacturers and Users!

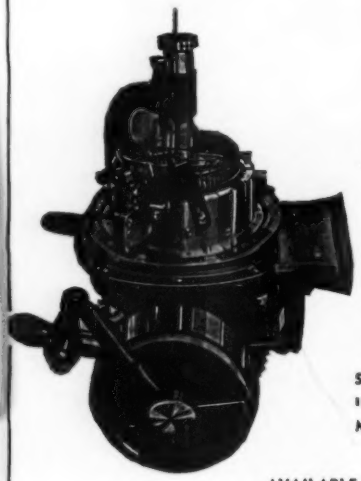
Magnification provides 3 times normal size view of work • Built-in light brightly defines part being examined • Full 3½" lens gives wide field of vision • Easy to use—it's portable—batteries in handle • Valuable for all inspection work on textile machines

Battery Model—$7.50 Immediate Delivery

Send order or write for free illustrated folder.

E. W. PIKE & COMPANY

492 NORTH AVE. ELIZABETH, N. J.



Argyle production

AT

MINIMUM COST

HARLEY-KAY-MARSLAND

SEMI AUTOMATICS ARE PRODUCING ARGYLES EFFICIENTLY IN MILLS THROUGHOUT THE WORLD

AVAILABLE IN

4" DIAMETER 80-112 NEEDLES
4½" DIAMETER 60-88 NEEDLES

Complete Range of Accessories—For Information Write

GEORGETOWN **HARLEY-KAY-MARSLAND LTD.** ONTARIO
ESTABLISHED 1906
CANADA

overlapping light intensities, are avoided.

The vertical back-lighting box is 36-in. high and extends across the machine. Individual groups of light tubes are controlled by separate switches so that, in examining narrow fabrics, lights at the sides can be extinguished to prevent glare and eye-strain.

In addition, a 12-in.-high lighting panel can be placed in the inspecting table to make it practically impossible for a defect discovered in the cloth, while in the vertical position, to be overlooked on the inspecting table.

The machine can also be fitted with a double take-up for separate handling of perfect and defective cloth.

Lock Plate Stops Harness Hooks From Turning

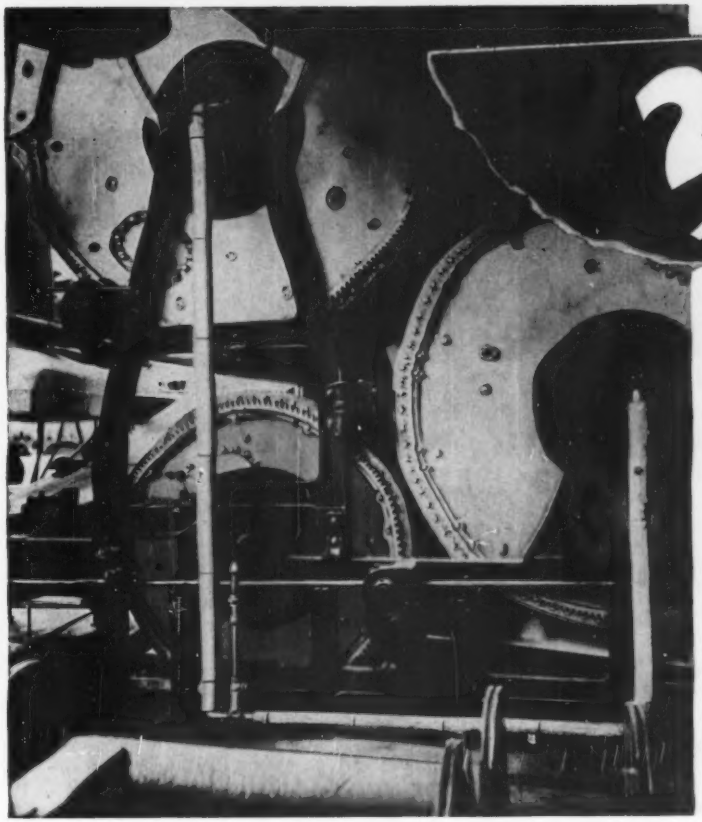
LOOSE HARDWARE or harnesses, a result of leveling harnesses by turning the hardware, is eliminated by use of this new lock plate.

In many mills, harness is leveled by turning the outside hardware either in or out with the result that in a very short time the hardware becomes loose and can readily turn. Where heddle frames run closely together, this loose hardware will result in cutting and damaging adjacent frames.

Steel Heddle Mfg. Co., Philadelphia, Pa., has recently developed an arrangement designed to prevent the ruin of countless shafts due to this turning. The device is simple, low in cost, and easy to install.

The lock plate consists of a short metal rod shaped to fit the bevel of the frame—one end of which is rectangularly slotted to fit the swaged portion of the hook. The other end is simply fastened to the frame with either a screw or nail according to preference.

Once locked in place, the hook cannot be turned at all for the purpose of leveling the harness. For that particular function, harness adjusters are available, and where outside hooks are used, fiber connectors are recom-



2/3 GREATER DRYING SURFACE

This modern slasher, utilizing two 7′ and one 5′ cylinders actually increases drying surface by more than 2/3! Production, depending upon several factors, is frequently increased by more than 50%.

The extra cylinder is only one feature of the complete assembly. Specially designed contact rolls further increase drying surface by increasing the contact of the warp with each cylinder. The positive drive turns drying cylinders, removing all strain from the yarn, maintaining greater elasticity and uniformity. Ball bearing mountings on cylinder shafts and contact rolls provide smoother operation.

Slashers like this can be built in your mill, utilizing equipment you already have, at a minimum cost. Let us supply you recommendations and estimates — without obligation. Write or telephone — today.

WEST POINT FOUNDRY & MACHINE CO.

(Batson-Cook Company, Owners)

WEST POINT, GEORGIA

THIN BOILING AND
TEXTILE STARCHES

Absolutely uniform and dependable. Careful quality control assures maximum performance in your mill.

AT YOUR SERVICE

The Hubinger technical staff and laboratories are widely recognized for their thorough and practical knowledge of the use of starch for textiles. Their experience assures you of the *best* product, *tailor-made* to fit *your specific needs*. Consult us on any production problem—at no obligation, of course.

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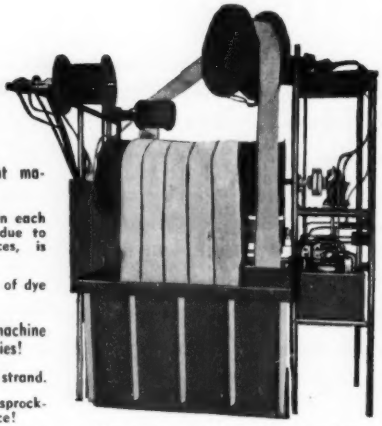
KEOKUK, IOWA · · EST. 1881

Compare the Advantages of

TEN-CO's
TENSIONLESS CONTINUOUS DYE BECK!



- Easily attached to present machine at present location.
- Even yardage can be put in each line; variation of shade, due to different length of pieces, is eliminated.
- Self-loading and unloading of dye beck saves labor.
- "Knockoff Control" stops machine automatically in emergencies!
- Maximum yardage for each strand.
- Hydraulic drive! No chains, sprockets, gears. Low maintenance!
- Can be loaded and unloaded simultaneously!
- Can take all qualities of cloth which can be dyed on a conventional dye beck, without difficulty!
- More lots per day, due to high speed throughout.

Many other textile machinery products available . . . For complete information write:

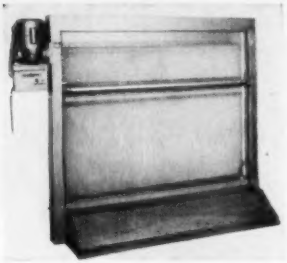
TEN-CO MACHINE CO.

Main Office
131 Oliver St.
Paterson, N. J.

Export Division—5th Floor
6 MURRAY STREET
New York 7, N. Y., U.S.A.

mended to save wear of the hook on the harness adjuster as well as the outside hook.

Air Filter Eliminates Lint-Screen Cleaning



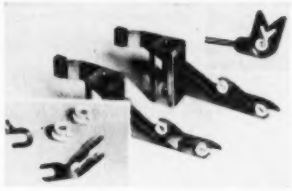
EACH AIR FILTER is controlled by an automatic timer and is driven by a 1/6-hp. electric motor.

A self-cleaning air filter for textile air-handling systems has been developed by The Bahnson Co., Winston-Salem, N. C. This Type-S air cleaner is said to eliminate routine cleaning of lint screens in all rooms except where lint and dirt are sticky.

The cleaner, available in several sizes, is mounted over recirculated-air openings on unit or central-station systems. It filters lint and dirt from the air and deposits them in an enclosed receptacle that is emptied periodically. No replacement of filter media is required, and the units are compact because they handle air at relatively high velocities.

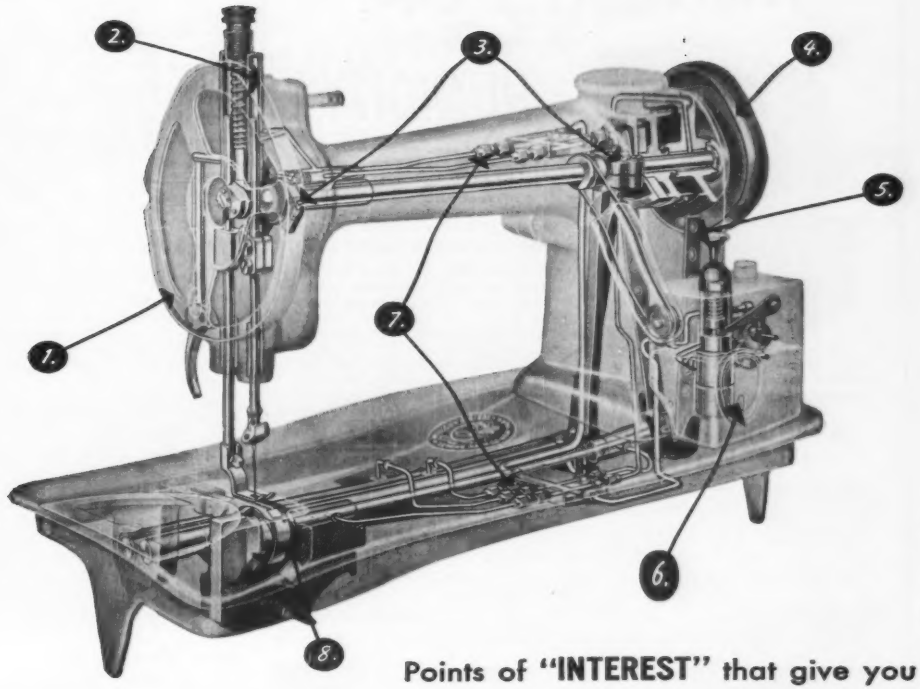
Construction is of heavy-gauge metal with a corrosion-resistant finish. A 32-mesh Lumite filter screen is used.

Clips Hold Guides Firmly On Abbott Quillers



GUIDE THROW-OUTS and guide breakage caused by throw-outs on Abbott quillers are eliminated by a new guide and spring clip.

A new and better way to hold guides on Abbott quill winders and detector wires has been developed jointly by Abbott Machine Co., Inc., Wilton,



Points of "INTEREST" that give you

A HIGHER RETURN ON YOUR INVESTMENT

in a "W&G" Type 10-A Lockstitch Machine

1. Rotary Thread Take-up, with instant adjustment for light, medium, or heavy thread. Saves operator's time — contributes to increased output.

2. Air Cushioned Needle Bar — assures smoother, quieter, high-speed operation with increased life of needle-bar bearings.

3. Replaceable Bearings for all shafts and bars — eliminate need for oversize parts and save time and expense of maintenance.

4. Safety Hand Wheel with improved web construction and deep belt groove that prevents accidental contact with belt hook.

5. Heavy-Duty Belt Drive, designed for extra long life at sustained high speeds. Eliminates back-lash common to gear drives.

6. Fully Automatic Lubrication, with belt-driven, force feed oil pump. Eliminates all manual oiling, saves operator's time, and increases machine life many fold.

7. Metered Oil Flow supplies the right amount of filtered oil to each bearing, according to its speed and load. Permits continuous operation at highest speeds without overheating.

8. Floating Bobbin Case requires no lubrication — prevents danger of oily threads and spoiled garments.

YES, in *every way*, this "W&G" Lockstitch Machine is designed and built to give many extra years of trouble-free service — to help you get increased production at minimum overall cost. For complete information, write for your free copy of Bulletin 886.

WILLCOX & GIBBS
Sewing Machine Co.

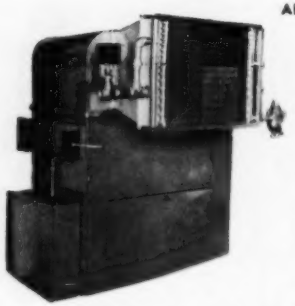
214 West 39th St., New York 18, N.Y.

For more information, write direct or use Reader Service post card.

THE HEAT'S ON!

AND CALLS FOR

HUMIDITY



Here's the ideal cold weather set-up brought to you in ONE UNIT by Air-Perme-Ator Mfg. Co.

Air-Perme-Ator's exclusive "dry" humidification system combined with heating coils assures adequate, thermostatically controlled heating AND by the distribution of velvety-smooth humid air actually protects yarns from drying out and becoming brittle. Sensitive fabrics *never* receive any direct hot blast of air.

And *because* Air-Perme-Ator works on the exclusive "dry" humidification principle, the unit pictured here (Model B-5) controls temperature and provides uniform relative humidity *without releasing any free moisture*. Yarns, machinery, valuable equipment—all are constantly protected.

No central system required. No costly installation. No expensive upkeep.

Up to 50% fuel savings.
Air washed and filtered.
Completely automatic.
Suspended platform installation.

Various sized units available.
Write for further details.

AIR-PERME-ATOR MFG. CO.

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NEWNAN, GA. *Established 1854*

TANKS TOWERS CYLINDERS VESSELS

N. H., and American Lava Corp., Chattanooga 5, Tenn.

The AlSiMag guide used has a shoulder. Under the shoulder there are flat and parallel notches on each side. When the guide is placed in position, the spring clip snaps easily into place, holds the guide firmly, and prevents rotation.

This new combination of guide and spring clip is designed to assure long, continuous runs and to eliminate guide throw-outs and guide breakage from impact of throw-outs.

The new guide and spring clips fit present Abbott winders. To convert to this improved guide system requires only the new AlSiMag guides and spring clips. Installation is far quicker and easier than with the old type. No cement is required. Simply insert the new eyelets and snap the spring clip in position. The eyelets are removed but cannot be accidentally displaced.

The spring clips may be ordered from Abbott Machine Co., Inc. The new AlSiMag guides are also stocked by Abbott under their number 44-8-54 or they may be ordered from American Lava Corp. under AlSiMag No. GE-24,446 for shipment after normal production intervals.

New Bearing Is Lined With Nylon

NYLON LINING OF THIS BEARING is slotted to allow for dimensional changes.

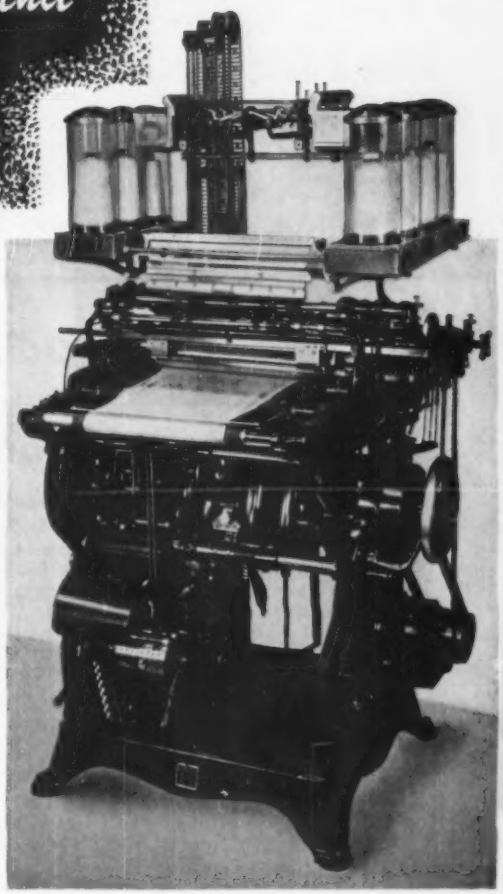
A bearing that has an outer sleeve of inexpensive metal and a thin lining of nylon bearing material has been developed by Thomson Industries, Inc., Manhasset, N. Y. The nylon liner is retained in the sleeve in a manner that will permit it to expand and contract circumferentially around the inner surface of the sleeve.

(*Continued on page 270*)

fast SUPERIOR PRODUCTION

IF IT'S A
WILDMAN
IT'S SUPERIOR

Single Head, Single Unit Full-Fashioned HOSIERY MACHINE



FAST — from the moment you purchase this WILDMAN Machine: delivered to you completely assembled; produces stockings a few hours after it reaches your floor; knits entire stockings in one continuous operation from top to toe.

SUPERIOR PRODUCTION — makes stockings of the finest gauges; takes silks, cottons, synthetics, etc. with equally perfect results; knits the entire stocking in one continuous operation from top to toe.

Truly, here is fast, superior production.
Inquire today.

WILDMAN MFG. CO., NORRISTOWN, PA.

PLASTIC BOBBINS
...made-to-order!

Something new! Plastic bobbins, spindles and tubes made to your specifications. Get the design your needs require. Just let us have your specifications. A plastic product may solve your bobbin problem.

We are expert die makers, and mold all types of products that demand accurate balance and great mechanical strength for high speed operation. Investigate our "made-to-order" service—Write or Call Trenton 4-5391.

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Converter Aprons

We have manufactured for several mills all three Leather Aprons used on the Pacific Converter. Two of these are Shuffle Aprons where a serpentine action takes place as the fibers pass between fluted rolls and leather apron. There is one Delivery Apron where the sheet of fibers is lifted from the apron and rolled diagonally into a continuous sliver of staple fiber. These three aprons form an important part of this high production machine. Try a set of Hay Micrometric Aprons for your converter today.

"For Those Who Want the Best"

Manufacturers of Leather Textile Specialties Exclusively

The HAY Line TEXTILE LEATHERS

JAMES E. HAY LEATHER CO.
244 SMITH STREET • LOWELL, MASS.

Called the Nylined bearing, the new product is said to eliminate the need for wide clearance necessary with plain nylon bearings. A narrow slot, or compensation gap, interrupts the circumference of the bearings material and allows for dimensional changes.

The new bearings can be press fit or clamped without cold-flow or creep problems. The compensation gap takes care of seizures due to stress formation, too.

Furnished in the plain-sleeve or flange type, the bearings can be fitted with a separate surface of bearing material where substantial thrust loads must be carried in addition to radial loads.

Slide Hook Improved

NEW SLIDE HOOK, called T-12, developed by Steel Heddle Mfg. Co., Philadelphia, Pa., is said to be easier to handle and more efficient in operation. The hook is self-adjusting and permits minimum separation of heddles. A larger bearing surface improves the free-sliding feature and reduces binding on the bar to a minimum.

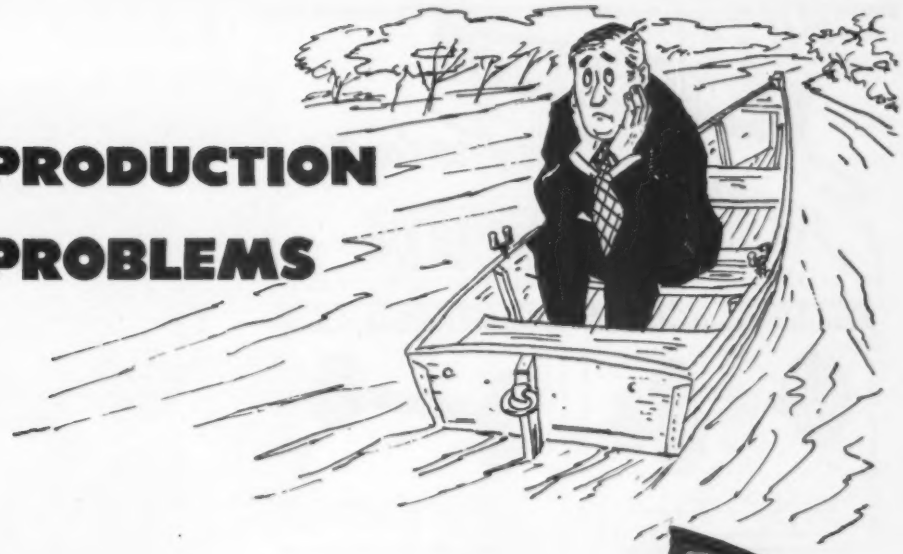
Waste Cutter Designed To Handle Nylon Filament

A machine recently developed by Taylor, Stiles & Co., Riegelsville, N.J., to cut nylon filament waste is of the prevailing revolving-knife-cylinder type but with several features that also improve results in cutting wastes of other fibers.

The feed apron has been raised so that the force of gravity helps guide the fibers between the feed rolls and the knives. Baffles have been put at the sides of the feed box, the feed roll has been lengthened so that its ends are entirely outside the guide box, and the ends of the feed roll have been so shaped as to urge the nylon fibers toward the center line of the cutting elements.

Speed of the knife cylinder has been adjusted to prevent fanning of the filaments during cutting.

The result is a reduction in down



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● The function of our Technical Sales Department is to help solve various production problems in the field. These men are constantly working with new products and techniques—perhaps this experience would be helpful in smoothing out production sore spots in your operation.

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A TIME TESTED LINE
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MILTON WARP BEAMS
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BROADLOOM BEAMS

For C & K Looms (pictured) and Draper Looms (with let-off gear). Steel barrels, cast iron flanges.

RIBBON LOOM BEAMS

Steel barrels, with your choice of adjustable head and fixed shaft (pictured) or fixed head with removable shaft.

Write for Catalog 45 (Steel) or Catalog 45-A (Light Metal)

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A REVOLVING STEAM CONNECTION
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Need Only a Few Minutes Attention Per Year!

It takes 10 to 15 minutes to install ROTARY UNIONS on your slashers, dry cans, calenders, printing, or coating machines. They are guaranteed to operate for one year without any kind of adjusting or tightening labor . . . thus saving you trouble, labor, and down-time.

This long trouble-free service is matched by ROTARY UNIONS' positive sealing and low per consumption. In design, accuracy of construction, and service, ROTARY UNIONS have no equal.

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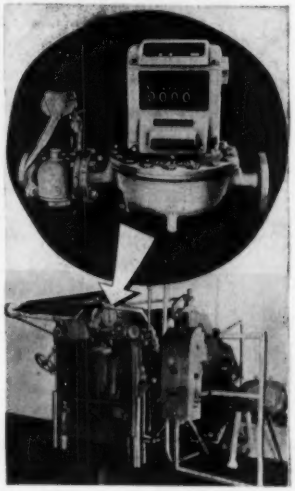
time, an increase in daily production, and an improvement in quality of the finished product.

Stop Meters Optional For Soaping Systems



AUTOMATIC SOAP METER can be used to replace conventional meters on existing equipment.

New optional equipment for soap-distributing systems made by Riggs & Lombard, Foot of Suffolk St., Lowell, Mass., is the Neptune "Auto-Stop" meter, which can be set for a given number of gallons and then will automatically shut off. The Neptune Auto-Stop meter is said to save ingredients, control formulas accurately, improve housekeeping, and provide accurate cost-accounting figures.

To operate, the tripping mechanism on the register is first set by pushing the buttons on the register until the number of gallons desired shows up on the setting wheels just above the buttons. The register is then cleared back to zero, the valve is opened, and the operator is free to devote his attention to other jobs. The tripping device automatically cuts off the flow when the exact quantity is delivered. Large numerals on the face of the meter keep pace with the flow, and provide a visual check when delivery is finished. A small shuttered totalizer, also on the face of the register, keeps cumulative totals.

The company is now prepared to supply the new Auto-Stop device as part of such systems for customers desiring automatic equipment. Auto-

FOR YOUR BLEACHERY MODERNIZATION PLANS . . .

ONE-STAGE OPEN-WIDTH SYSTEM
Capacity: Up to 1500 lbs. per hour

TWO-STAGE OPEN-WIDTH SYSTEM
Capacity: Up to 3000 lbs. per hour

Consider Du Pont Open-Width Continuous Peroxide Bleaching Systems

IF YOU PLAN to modernize your bleachery, expand production, especially for speedy, economical handling of heavy fabrics, investigate the Du Pont Open-Width Systems. They are by far the most economical units of this type developed to date.

Introduced by Du Pont in 1943, they're specifically designed to handle heavy fabrics and tightly woven goods—heavy twills, drills, poplins, etc. They speed bleaching, cut costs in chemicals, steam and maintenance. Today, 16 of these systems, incorporating Du Pont principles, are operating in a number of leading mills.

Other types of Du Pont continuous systems, with capacities from 500 to 6,000 lbs./hr., are available. In fact, capacity of Du Pont designed installations operating or under construction is now over 75,000,000 yards per week—more than one-fourth the current annual U. S. production of cotton piece goods!

Let us tell you more about these cost-saving systems. We don't build or sell the equipment. But our Technical Service can help you select the right bleaching system for your requirements of production, type of fabrics to be bleached, utilities, and other economic factors. Bleaching specialists will help you survey your production facilities, make specific recommendations on equipment, give estimates and operating costs. After you decide on a system, Du Pont Technical Service representatives located in leading textile centers will help you start operation and train your technical and operating personnel. This service in no way obligates you.

For further information on Du Pont Continuous Peroxide Bleaching Systems, send the coupon below.

Tune in Du Pont "Cavalcade of America," Tuesday nights—NBC coast to coast

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Electrochemicals Department, Wilmington 98, Del.

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Stop meters can also be supplied for measuring oil for picker rooms with the Riggs & Lombard oil-distributing system.

Carpet-Loom Beam Is All Steel

NEW ALL-STEEL, all-welded carpet-loom beam has been announced by Edward J. McBride Co., Inc., Philadelphia, Pa. To meet the requirements of individual mills, this new beam can be furnished with bar lock for warp ends or with key slots.

Metallizing Done 40% Faster With New Gun

TWO NEW GUNS are available—one for regular work at higher speed, the other for corrosion-resistant metals, like zinc or aluminum.

Two new metallizing guns have recently been announced by Metallizing Engineering Co., Inc., Long Island City, N.Y. The new guns, Metco Type 4E for machine-element work, and Type 5E for corrosion-protection coatings, are said to develop the highest spraying speeds yet available in guns designed for hand-held operation.

The new guns are said to provide the nearest thing to automatic operation yet devised. Incorporated in the guns is a patented jet-siphon principle in the gas head that automatically compensates for variations in gas pressure as high as 10 lb., and provides a steady, unvarying flame that produces uniform coatings at lower cost than pre-

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250 MILLION
SQUARE FEET OF
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FLOOR . . .
Prove its Value!

More and more flooring is Kalman flooring, for Kalman has, over 35 years, become the word for serviceability, long term durability.

For a uniformly hard, wear-resistant floor, it will pay you, too, to become familiar with Kalman. Write for literature—ask about Kalman "absorption control", the key to floors at their toughest.

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Another FIRST!

KREELON CD

the only promoted industrial detergent on the market!

It's a fact! Kreelon* CD is the first promoted industrial detergent ever offered in one product —the only product of its kind on the market today. Developed by Wyandotte and available only at Wyandotte, it combines the advantages of an excellent synthetic detergent and an excellent detergent-promoter.

What does this mean to you? If cotton's your line, you'll find that Kreelon CD will do a far superior job for your scouring, kier boiling, after-soaping and in other phases. It imparts superior soil removal properties . . . provides greater prevention of soil redeposition . . . will give much brighter color. And if you're in wool, silks or synthetics, you'll find Kreelon CD excellent for your processing operations.

Strong claims—yes, but we can back them up. Let us show you how the use of Kreelon CD can save you time, trouble and money. We'll be glad to work with you—no obligations, of course. Get the jump on competition—write us today.

Fast facts about Kreelon CD

- Kreelon CD can be substituted for the anionic detergent you're now using—and you'll get 20% to 70% improvement in soil removal and whiteness retention.
- Kreelon CD dissolves rapidly—is easy to use, fast-acting. It is also dustless.
- Kreelon CD is economical. A promoted detergent containing Carbose*, it gives you the advantages of a synthetic detergent and detergent-promoter in one product. It's ready to use — saves you storage space, handling and mixing time.
- In the processing of cotton, Kreelon CD is far more efficient than any synthetic detergent alone. It delivers superior results in scouring, kier boiling, dyeing, bleaching, desizing and finishing.
- In the processing of wool, Kreelon CD is highly effective in raw wool scouring, carbonizing and dyeing. In silks and synthetics, it is recommended for desizing, bleaching and scouring.

*Reg. U. S. Pat. Off.

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CALCIUM CARBONATE • CALCIUM CHLORIDE • CHLORINE
HYDROGEN • DRY ICE • SYNTHETIC DETERGENTS • GLYCOLS
CARBOSE (Sodium CMC) • ETHYLENE DICHLORIDE • PROPYLENE
DICHLORIDE • AROMATIC SULFONIC ACID DERIVATIVES
OTHER ORGANIC AND INORGANIC CHEMICALS

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Lev-R-Matic DRIVE

FORK LIFT TRUCKS*

Mobilize your materials handling and production flow with MOBILIFT. . . . Only MOBILIFT gives you Lev-R-Matic, push-pull, easy-to-operate grouped controls with NO GEARS TO SHIFT . . . plus efficient compactness for speed and maneuverability in restricted places.

Get more work done in less time at less cost with MOBILIFTS!

NEW STAND-UP MODEL "E" 2,000-LB. CAP. TIER-MASTER tiers 3 pallets high from an overall collapsed height of only 72". It easily enters truck bodies and low clearance doors.

* STAND-UP MODELS available with 63", 72" and 83" Mast.

SIT-DOWN MODELS with 63" and 83" Mast.

Grouped 2-Way Levers Perform All Jobs

PUSH & PULL

NO GEARS TO SHIFT

MOBILIFT Lev-R-Matic DRIVE

WRITE TODAY for complete information.

MOBILIFT CORPORATION

835 S. E. MAIN ST., PORTLAND 14, ORE.

CHICAGO • E. RUTHERFORD, N. J.

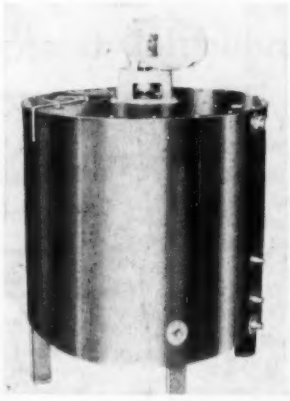
DALLAS • ATLANTA • BERKELEY

viously possible. The guns also incorporate an automatic control of wire feed that compensates for kinks in the wire, reel-stand drag, etc.

The Metco Type 4E Gun is designed to spray all wires from 20 B&S gauge to ½ in. in any metal—carbon steels, stainless, Monel, bronze—at speeds up to 40% faster than previous models. The gun is expected to cut machine-part repair and salvage costs as much as 85% to 90%.

The Type 5E is the first gun specifically designed for high-speed spraying of the softer metals, such as zinc and aluminum, for protection of equipment and structures against corrosion. The 5E Gun sprays 3/16-in. wire and will deposit as much as 55 lb. of zinc per hour or 15 lb. of aluminum per hour. The guns may be mounted for use on a lathe or other machine in production line work or may be used in hand-held operation. Weight is 4 lb., 12 oz.

Stainless Kettles For Textile Use



FIBERGLAS-INSULATED KETTLES can be furnished in several combinations.

A new line of stainless-steel mixing and storage kettles, for warp size, backfill, dye, etc., has been announced by The Textile Shops, Spartanburg, S. C. The new kettles can be furnished with single- or double-motion stirrer assemblies and with bottom and/or side steam jackets in combination with open and/or closed steam coils.

Insulated with Fiberglas and sheathed with stainless steel, the new line of kettles also has nylon foot bearings. Among other features are: self-aligning ball-bearing suspension of the stirrer assembly, vapor and grease seals for the stirrer shaft, cast-

42

STOCK SIZES IN HALLOWELL® SOLID STEEL COLLARS

Precision machined for shafts from ¾" to 3" diameter inclusive.

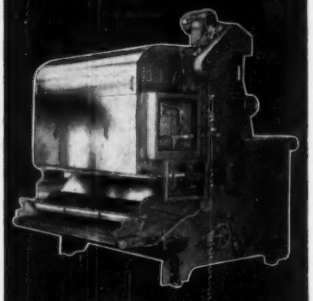
Write for prices and name of your nearest distributor.

SPS

STANDARD PRESSED STEEL CO.

JENKINTOWN 35, PENNSYLVANIA

Geo. S. HARWOOD & Son

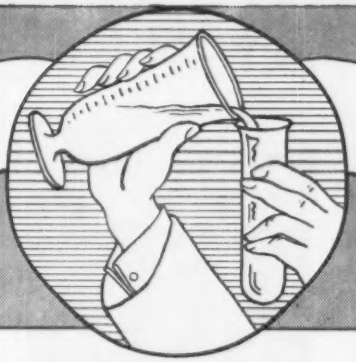


SPECIALISTS IN TEXTILE FEEDING MACHINERY SINCE 1863

50 LAGRANGE STREET

WORCESTER 8, MASS.

Tested!



Controlled

Prove the Value of these

Brytex PRODUCTS

in Your Own Plant—at Our Expense!

BRYTEX SPUN SIZE S

A scientifically designed slashing formulation for staple fibres. Improves weaving efficiency, reduces shedding and is readily removed in finishing. One material for all blends whether acetate, viscose, wool or combination.

BRYTEXGUM #813G

A finish and weighter that will not discolor, become sticky or gum up. Gives maximum weight with a minimum of additional stiffness. May be used in conjunction with most all types of resins and softeners.

Write for Free Trial Sample
of Any Brytex Product

ASK FOR BOOKLET NO. 7

BRYANT CHEMICAL CORPORATION

NORTH QUINCY 71, MASSACHUSETTS

BOX 2301, SPARTANBURG SOUTH CAROLINA

two
great models
for
TESTING
MOISTURE
CONTENT
in wool, cotton,
rayon and nylon

MODEL PD-1 for textiles in loose or compressible forms—3" penetration.

MODEL K-2 for textiles in cones, rolls, beams and similar forms.

10-DAY FREE TRIAL!

Try one of these moisture testing instruments for 10 days—use it, test it and prove its superiority. Send samples, moisture range and Purchase Order to cover trial period. No obligation!

Quick, Accurate Readings

In less than 3 seconds you can test moisture content of practically all types of textile materials, including cotton, wool, rayon and nylon in fabrics, packages and loose forms.

This portable instrument is designed for "on the spot" checks in your plant. Moisture Register is easy to operate—requires no technical knowledge or complicated figuring. Cost is negligible in comparison to advantages. Write today for complete details. Specify type of material to be tested.

MOISTURE REGISTER CO.
Dept. G
1510 W. Chestnut St. Alhambra, Calif.

ELECTRONIC MOISTURE REGISTER
Mfd. by
Moisture Register Co.
1510 West Chestnut St.
Alhambra, California

aluminum motor and gear housing, safety handle for the manhole cover, vent and overflow connections, and a conical or dished bottom.

Smaller Thread Inserts Now Available

STRONGER AND MORE DURABLE THREADS are claimed when these inserts are used. Note paper clip for size comparison.

Four new small-size, stainless-steel, helical-wire thread inserts, for strengthening tapped threads in aluminum, magnesium, plastic, iron, steel, brass, bronze, and wooden components, are available from the Heli-Coil Corp., 47-23 Thirty-Fifth St., Long Island City 1, N. Y.

These new sizes, extending the use of the thread inserts in small holes, include 8-36 and 6-40 sizes in the fine-thread series, and 5-40 and 4-40 sizes in the coarse-thread series. They are available in 1-, 1½-, and 2-diameter lengths.

Installation of helical-wire thread inserts in either small components or heavy-industry castings is said to accomplish the same result—stronger and more durable threads. Insert-lined holes withstand substantially higher loads than unprotected holes. Threads in these holes are more resistant to wear, corrosion, seizing, and galling.

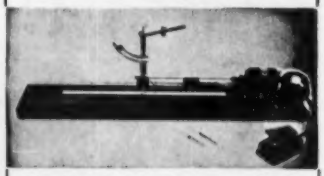
The maker claims that material cost and installation time in thread-repair operations can be reduced as much as 80% when inserts are used.

Predetermined-Length Controller Now Automatic

An improved model length controller, The Excelsior, Mark VII, for doubling machines, said to be accurate to 1 yd. in 10,000, has been developed by Thomas Walker & Son Ltd., 58 Oxford St., Birmingham 5, England.

The new predetermined-length controller is fully automatic and does not

PRECISION
TWIST TESTERS



For Determining Turns per Inch in Continuous Filament or Spun Singles and Ply Yarns
For Determining Take-Up Due to Twist in Filament and all Types of Plied Yarns

•

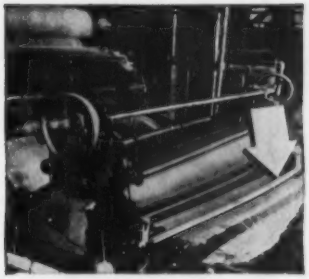
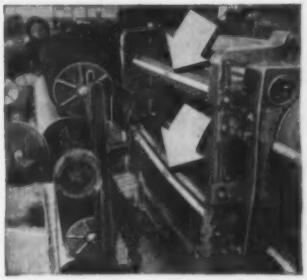
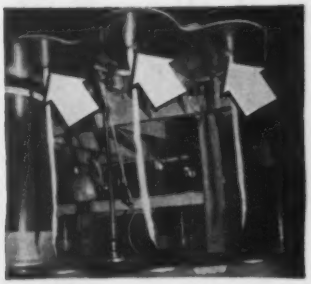
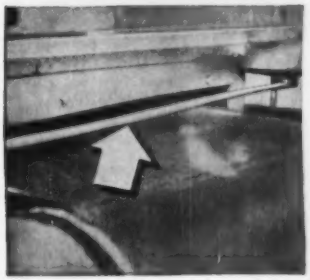
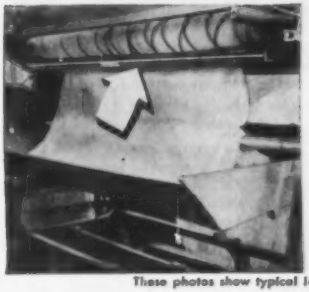
ACCURACY - SPEED
EASE OF OPERATION

•

Write for literature and prices

UNITED STATES
TESTING COMPANY
INC.
1415 Park Avenue
Hoboken, New Jersey

Costly troubles that happen here...

These photos show typical Ionotron Static Eliminator installations in textile mills.

...need not happen in your mill

— because Ionotrons eliminate static troubles on Peraltas, condensers, pin drafters, coaters, ironers, tenter frames, and other textile machines

Like most mill men, you probably know all too well how static electricity makes fibers and fabrics difficult to handle . . . causing costly stoppages and spoilages. But you may not realize that many such troubles can be *eliminated* — practically, permanently, and safely — with Ionotron Static Eliminators.®

PROVED IN MANY MILLS

Proof of the effectiveness of Ionotrons comes from many mills. Van Raalte at Saratoga Springs reported a 5% increase in production by eliminating static-caused tension on their tentering machine. Nathan Schwartz & Sons, Philadelphia, said, "In the winter it is almost impossible to operate machines efficiently, due to heavy static charges . . . especially in nylon. With Ionotron Static Eliminator discs, this problem is easily overcome, and machines run freely and flawlessly." Broadalbin Knitting Company, Broadalbin, N. Y., installed an Ionotron bar on the Peralta of a wool card and reported 50% less spoilage, 10% more production, 10% reduction in operating time, and better-quality work. Triangle Finishing Corporation, Johnstown, N. Y., reduced cloth swing stoppages 20%. Kenwood Mills, Albany, N. Y., said the Ionotron prevents stoppages formerly caused by wool webs picking up static and winding around aprons.

If your application is for wool and worsted machines, write Davis & Furber Machine Co., North Andover, Mass. Concerning any other textile application, write Dept. T11, U. S. Radium Corporation, 535 Pearl Street, New York 7, N. Y.

GET THE WHOLE STORY

Ionotrons are an application of atomic energy. Alpha rays ionize the air in the trouble zone — and the static trouble disappears. How this works is described in a booklet we'll gladly send you.

Whatever your static trouble, you can easily find out whether Ionotrons can eliminate it. With the booklet, we'll send a questionnaire to help you describe your problem to us. Then we'll tell you honestly how effective Ionotrons would be in solving it.

USRC
IONOTRON
Static
ELIMINATOR

Corrosion Protection for All Metal Surfaces

Hysol 4000 Coatings

Whatever the cause of corrosion, Hysol Coatings will give up to 10 years of absolute protection. Equally effective immersed in liquids or exposed to corrosive atmospheres, these coatings take the form of tough chemical and abrasion-resistant films. They can be applied by your own personnel without special equipment. With proper application strong adhesion to all metal surfaces is assured. *Write for technical data.*

- Resistant to salt water and practically all chemicals.
- Applied by brush, roll, spray or dip methods.
- Finish coat in eight colors.

houghton laboratories, inc.
OLEAN, NEW YORK

Plants in Olean, N. Y. and Smethport, Pa.

have to be normally reset to the predetermined reading for repeat runs. A new dial automatically records total yardage or completed cycles.

Other improvements provide:

Constant indication of the length to which the controller has been set, with the presetting guarded by a Yale lock.

Constant indication on a large dial of the length of yarn still to be processed.

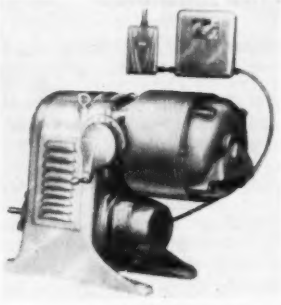
Automatic knock-off of the frame at the end of the run.

The Excelsior controller is set with a winding key that cannot be inserted until the Yale lock has been turned to clear the winding hole.

Once the small lower dial has been set and both keys withdrawn, the controller automatically sets itself, and the large indicator hands will register the same reading as the small present dial. The frame is then started and drives the indicator hands back to zero, at which point the motor driving the frame is stopped, the controller automatically resets, and the counter dials register one completed cycle.

The Excelsior controller, Mark VII, can be arranged for direct flexible drive from the roller shaft of the frame, or for remote electrical drive, and can be used to control any outside circuit as the No-Volt coil of the frame motor starter or solenoid belt striking gear on certain types of frame.

Varidrive Unit Improved By Electric Brake



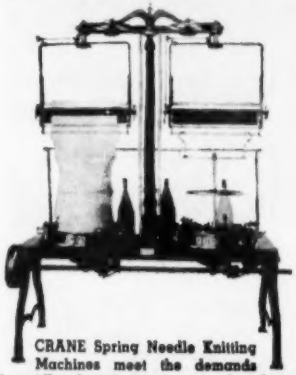
AN ELECTRIC BRAKE mounted directly on the variable-speed shaft provides shockless operation and permanently set braking torque.

Fast, controlled braking of U. S. Varidrive Motors is now possible through a new development of U. S. Electrical Motors, Inc., 200 E. Slauson Ave., Los Angeles 54, Calif. The brake used, a Warner type ICB, is mounted directly on the variable-speed

1870 **CRANE** 1951

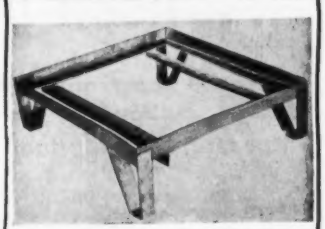
SPRING NEEDLE KNITTING MACHINES

Speed - Quality - Low Cost



CRANE Spring Needle Knitting Machines meet the demands of rapidly changing patterns and styles on all weights of fabrics.

CRANE
MANUFACTURING CO.
LAKEPORT, N. H.



LIFT TRUCK SKIDS

Sturdy angle iron construction. Made to fit your lift truck. Let us quote on your specifications.

WAYNE MANUFACTURING CO.
HONESDALE, PA.

Manufacturers of Textile Mill Supplies

Ready to Go!

Ready for shipment from stock are these and other hard-to-obtain textile parts, such as clutch gears, worm gears, comb box forks, lickerin shields, bobbin and spindle plate and coupling gears, mote knife brackets, grinding roll brackets, and stripping brush brackets.

We can promise *quick delivery* on such items. Send us your order *today*. All orders will be handled the date they are received. Don't be late with yours.

Southern States Equipment Corp.

HAMPTON GEORGIA

Representatives - Mechanical Division

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Largest Manufacturer of Cast-Tooth & Cut-Tooth Gears in the South

TEXTILE PROCESS ENGINEERS INC.

Specialists in technical and management controls with a 14-point survey which includes such important factors as:

1. Plant Layout
2. Checking Machine Capacities
3. Checking Processes
4. Revising Operating Methods
5. Setting Work Loads
6. Incentives
7. Executive Controls

Our business is to improve mill profits. Satisfactory results guaranteed. Client references upon request.

1329 HEALEY BUILDING
Atlanta, Georgia

shaft and eliminates transmission of the braking action through the belt. Ideal for inching or jogging, the brake offers instant, shockless operation without noise and produces a constantly increasing torque during stopping.

Containing few parts, the ICB has a mechanical movement of only 1/16 in. Unlike the solenoid-type brake, its frictional force is controlled directly by the magnetic action of the brake. Adjusted with accuracy, the braking torque, once set, is permanent—an important aid in applications demanding accurate regulation. For installations requiring diversified braking torques, adjustment is easily made through a knob-controlled rheostat. Designed to dissipate a high rate of heat, the ICB insures stability of operation with long, safe and trouble-free service.

Adaptable to both U. S. Varidrives and Varidrive-Syncrogears, this brake is d.c. actuated with low power requirements—maximum 25 to 35 w. Power-conversion units are used where a.c. voltage is supplied.

NOBLE COMBS
and
COMB BALLER

Interchangeable repair parts and units for modernizing, standardizing brush motions, even pressure roll stands.

GEARS
Carefully manufactured gears in stock for combing, gilling and spinning.

JAMES SMITH
and Son, Inc.
Manufacturers of Worsted Machinery
982 SOUTHBRIDGE ST.
WORCESTER, MASS.

FOR STATIC ELIMINATION

The Simco "Midget" is safe, efficient, inexpensive!

the SIMCO company
9th and Master Streets
Philadelphia 22, Penna.

Durable Base for Skewers

OLD SKEWERS CAN BE REJUVENATED, and new ones improved, by this plastic base.

A plastic skewer base that offers several advantages has been announced by Atlanta Belting Co., Atlanta, Ga. The base is attached to the skewer barrel by means of a screw in the base. Rotation of the skewer in use tends to tighten the connection. The two pieces can also be permanently cemented together if desired.

The base, practically indestructible under normal working conditions, gives sufficient friction at the seat of the bobbin so that roving will not slough off.

Mills can use their present skewer barrels with a minimum of machining. Bases may be purchased with or without barrels, and they are available in either black or bright red.

IT'S WHAT IS IN THE DRUM THAT MAKES THE DIFFERENCE

USE SCOURCLEAN A
for removal of oil etc. in soft water

SCOURCLEAN X
for scouring in hard water

Many other varied uses if you have a scouring or dyeing problem — write for details.

So. Office - 205 S. Church St., Charlotte, N. C.

RICHMOND OIL, SOAP AND CHEMICAL COMPANY INC.

Export Agents
HOWARD G. GODFREY AND CO., INC.
456 Fourth Ave.
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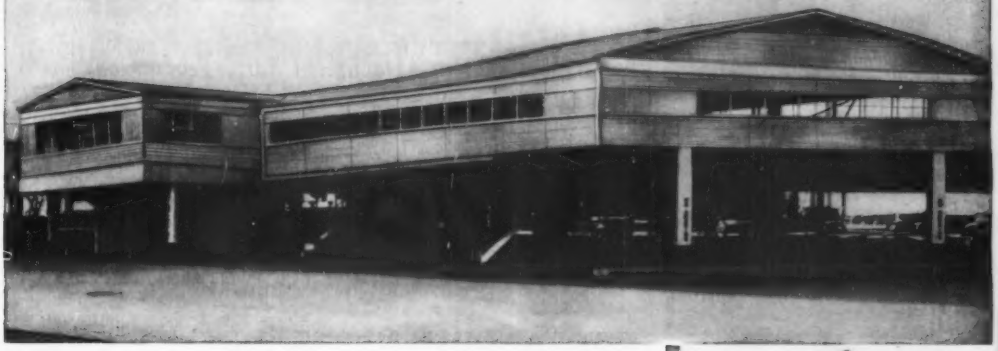
LOWER COST LOAD ON LOADING RACK



This Esso Loading Rack in Washington, D. C., illustrates the rapid trend to aluminum for gasoline distributing centers. This roofing and siding combines strength with light weight; cuts framing costs; reduces total weight of the superstructure. Corrosion resistance and freedom from rust mean long life with minimum maintenance—no painting. And aluminum's radiant heat reflectivity takes the sun load off the big roof area, keeps workers comfortable in summer.

In this Esso design, the lower part of the projecting office quarters is sided with Reynolds *Lifetime* Aluminum Weatherboard—for decorative contrast. All the rest of the walls and the roof are Industrial Corrugated. For literature, technical assistance and application details, call on Reynolds.

Offices in principal cities. Check your classified phone book for our listing under "Building Materials," or write: Reynolds Metals Company, Building Products Division, 2005 South Ninth Street, Louisville 1, Ky.

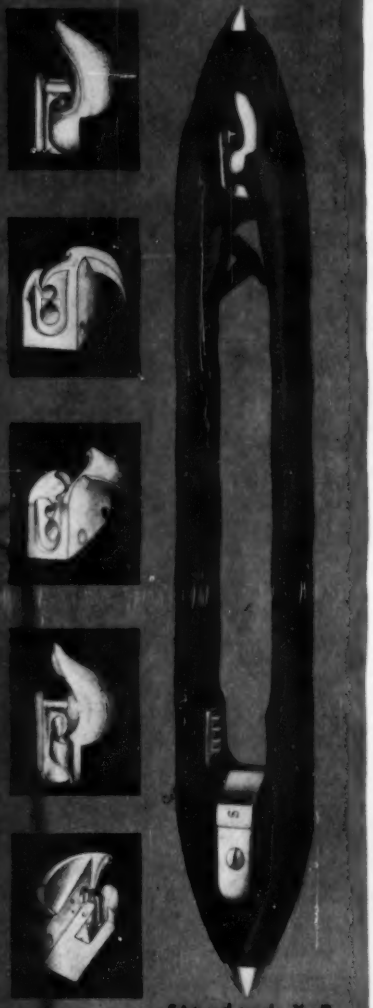
Aluminum is required for planes and other military needs. Reynolds *Lifetime* Aluminum Industrial Corrugated is still produced, but the total supply is necessarily reduced. Rated orders receive priority handling.

Specifications for Reynolds Lifetime Aluminum Industrial Corrugated:

Thickness .032"
Corrugations 7/8" deep, 2-2/3" crown to crown
Uniform load support (roof) 80 p.s.f. on 4' purlin spacing
Uniform wind load capacity (siding) 20 p.s.f. on girt spacings up to 7'9"
Roofing width 35", coverage 32"
Siding width 33-3/4", coverage 32"
Lengths 5', 6', 7', 8', 9', 10', 11', 12'

REYNOLDS *Lifetime* ALUMINUM INDUSTRIAL CORRUGATED

Stehedco and Southern

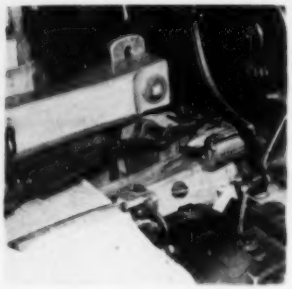


A few of the most popular types of eyes

Standard X-2 Draper Loom Shuttle, with series of interchangeable eyes

#162 Short Eye, solid short cover with complete scroll

British Device for Jerked-in Filling

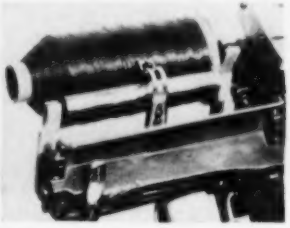


THIS HOOK holds filling ends securely for the thread cutter.

Jerked-in filling is said to be prevented with a device developed by British Northrop Loom Co., Blackburn, England. The device uses a hook to collect the ends from both the empty bobbin and the new bobbin at the transfer.

Both filling ends are thus said to be drawn away from the path of the shuttle. The attachment can be fitted to single- and multi-shuttle looms.

King-Spool Winder Attachment Raises Production



COMBINATION PRESSURE ROLL and guide cut down time required for tying in ends.

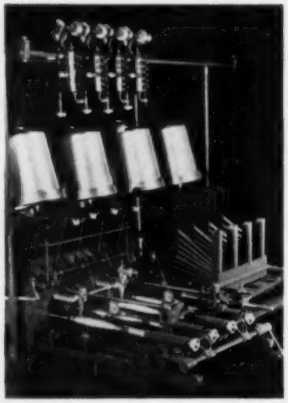
Increased production through a saving in operating time by improved provision for tying in ends is claimed for the King-Spool attachment developed by Foster Machine Co., Westfield, Mass., for the Foster Model 75 winder. The new attachment is used chiefly for winding thread yarn.

Time loss is sharply reduced because to tie in an end the operator moves only one piece of mechanism, a combination pressure roll and guide. In conventional attachments these two units are independent of each other and have to be moved separately.

The pressure roll of the King-Spool attachment is equipped with ball bearings, and the taper of the spool is actuated by positive rack-and-pinion control. As the guide-way moves out, the package moves forward at the same rate, so that the end taper of the package follows the 45° taper of the base of the spool very accurately. Any length of traverse is possible up to 6 in.

Another advantage of the King-Spool attachment over conventional attachments is that it has a ½-in. solid spindle, which cannot be easily bent or damaged, as contrasted with the smaller and less resistant spindles now in general use.

Automatic Cop Winder Runs 6,000 Rpm.



FOUR HOSIERY cops are produced in one operation by this new winder.

A new cop winder, the Foster-Muschamp Autofill hosiery cop winder, introduces a new way of winding hosiery cops automatically, according to Foster Machine Co., Westfield, Mass. Four perfect cops are produced in one operation, and the machine is capable of continuous production with no attention beyond replenishment of the cop battery and yarn supply.

Completely automatic, the Autofill winder is compact and simple to maintain, with all working parts and controls easily accessible. Diameter control is mechanical, with no builder wheel in contact with the yarn to cause broken filaments. Constant spindle speed up to 6,000 rpm. is possible. Special features, as the yarn-layer-locking device to prevent sloughing, contribute to consistent cost-cutting performance, the company states.

SOUTHERN...

THE HALLMARK OF "THE WORLD'S FINEST SHUTTLE"!

To withstand the violent, numerous impacts produced by modern high speed looms, a shuttle must be rugged, yet consideration must be accorded the finest precision *required in the unerring transmission of the most delicate threads used. Southern* researchers, designers, development engineers and master craftsmen, working in one of the largest single unit shuttle plants in the world, *(100,000 sq. feet of modern dust and humidity controlled, air conditioned plant with the latest equipment)*, are responsible for initiating every major improvement in this, the most highly developed shuttle used in modern mills today.

Southern—Quality begins with the selection of raw materials and *Southern's* own sawmills control this selection. Its vast factory and warehouses are always assured the pick of the world's finest shuttle materials. The scientific control of the drying process known as *Tempering* developed by *Southern* engineers, still remains a secret.

Southern has also applied its scientific materials selection, design, and manufacturing techniques to developing the foremost line of eye types for the most difficult yarns and fabrics. Controlled from their own foundry through their own patented machining process.

Southern tips, eyes, and grips when assembled into Tempered Dogwood blocks, produce the shuttle required for today's high speed looms and it is these shuttles that have earned for *Southern*, the title . . . "Scientific Shuttlemakers."

Billet flanked high speed moulding machines

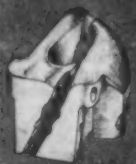
Battery of routers forming profile cuts and intricate indentations

Bonding and Covering department using secret formula and equipment

A section of final assembly

One corner of Eye Department

Standard 5-6 C&K Loom Shuttle for 7½" Quill



#800 Knee Tension Slanting Pad Eye

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Southern
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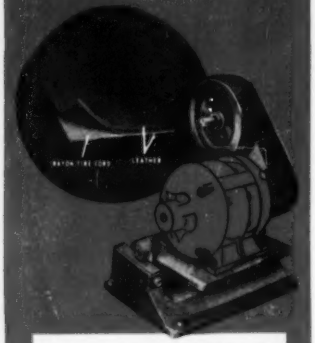
QUALITY SHUTTLES

NEW
SCHIEREN
Stretch-Resistant
BELTS
INCREASE MACHINE OUTPUT



SCHIEREN DUXBAK RAYON-CORE FLAT LEATHER BELTING has a layer of rayon tire cord between two layers of leather. As a result, the belt combines the pulley gripping ability of first quality leather with a stretch-resisting core that maintains initial tension for months or even years.

This anti-stretch feature increases machine output by drastically reducing the usual downtime for belt shortening or other maintenance. The ideal belt for winders, strippers, eccentrics, cards, knitting machines and spinning frames. Supplied as endless belts or with prepared laps or in roles. Made in all weights; heavy, medium and light.

OTHER SCHIEREN PRODUCTS include new check straps which outlast ordinary checks 3 to 1; perforated rub roll aprons that provide long service life and minimum heating difficulties; comber, gill box, French rub and washback aprons made of leather specially tanned for strength, durability and pliability; all types of straps, pickers, discs, etc.

Write for complete information or price quotations on any of the above products.

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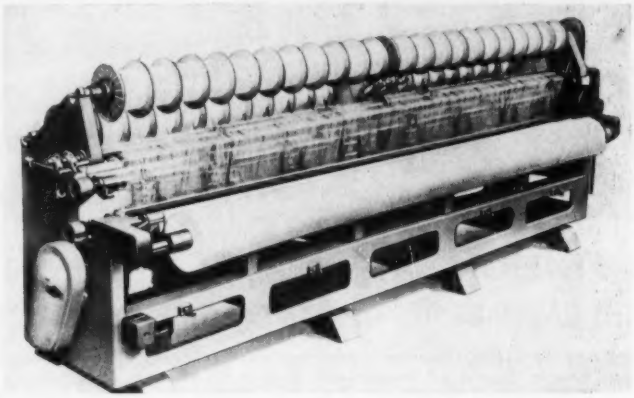
Mayer Tricot Machine Promises Higher Production



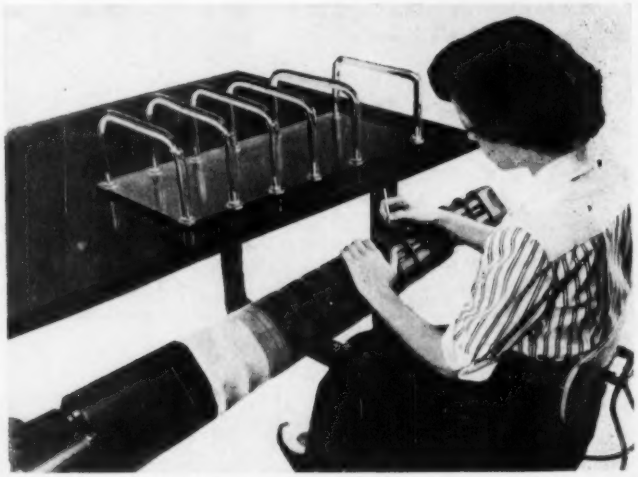
NEW 168-IN. TRICOT KNITTER has many new features and is said to increase production up to 30%.

The latest type Mayer tricot machine is now available through Alfred Hofmann & Co., West New York, N.J. Described as the latest in 168-in. machines, the Mayer high-speed warp-knitting loom can increase production up to 30%, the company states.

Other features include: a new machine-drive principle for reducing stop marks, self-contained frame construction for rigidity, direct guide-bar control, sensitive yarn tensioning and warp-control mechanism to assure uniform cloth quality, lightweight aluminum leverage arms to speed-up knitting motions, and increased fabric take-up capacity with 21-in. beams.

The machine is available with two or three guide bars and a cut-presser-pattern bar. It takes 22- to 34-gauge yarn.

Inspecting and Mending Done in One Operation



NEW INSPECTING AND MENDING FORM developed by Shoaf Hosiery Form Co., Ann & Academy Sts., Concord, N. C., permits inspection and repair in one operation by one operator. Goods brought from the seamer are pulled on the form while in the "open" position. If repairs are necessary, the form is retracted. The form is 42 in. long; has a smooth, black finish, and a hole in the toe to facilitate turning.

Hot Coffee

for Textile Workers Near Their Work

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PORTABLE HOT COFFEE DISPENSING CARRIERS

Management is finding that with the older workers, women workers, less experienced workers it is now necessary to employ, a mid-shift cup of hot coffee serviced to workers at their work is a welcome pick-up and refresher that workers appreciate.

Hundreds of large industrial plants have adopted the practice of servicing workers a mid-shift cup of hot coffee at their work by means of AerVoiD High Vacuum Insulated Hot Coffee Carriers.

They find that the saving in time as compared to having workers running around the plant quickly pays for the AerVoiDs.

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Also AerVoiD hot food and soup carriers, AerVoiD bulk milk carriers, the AerVoiD mobile canteen to expedite factory feeding. Ask for Factory Envelope TW-10.

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- **Can we reduce the cost of our service and still improve the quality of our food?**

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Slater System is operating in-plant feeding services for more than 150 industrial and textile concerns. Our twenty-five years of successful experience in designing and managing food service programs is available at your request.

Write for our 25th Anniversary Bulletin and list of our clients.

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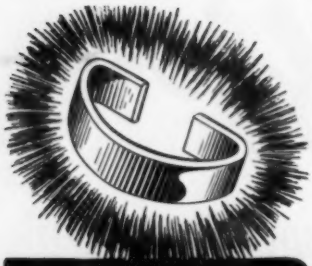

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New Agents Clean Machine Parts by Cold Dipping

BEFORE

AFTER

A remarkable cleaning job is claimed for Kleenapart and Kleenakarb, new cleaning agents developed by The Selig Co., 336-350 Marietta St., N.W., Atlanta 1, Ga. The agents will clean valves, gears, sprockets, frames, chains, screens, and all machine parts. The removal of oil, grease, dirt, grime, carbon, and other foreign matter is accomplished by a simple "cold-dipping" process that requires no attention, it is claimed. Parts to be cleaned are simply immersed in Kleenapart or Kleenakarb for the required length of time, then removed, rinsed, and are ready for use or storage. Both products are listed by the Underwriters' Laboratories and are safe to use when directions are followed.

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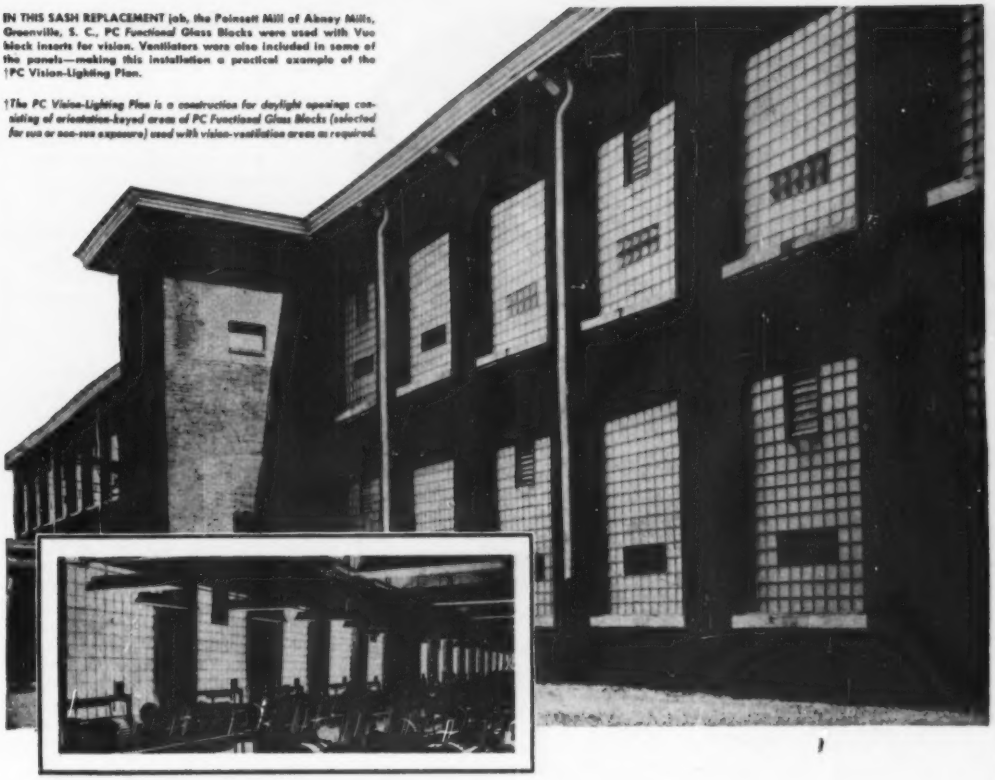
[SEAL] ELVA G. MASLIN
(My commission expires March 30, 1952)

IN THIS SASH REPLACEMENT job, the Poinsett Mill of Abney Mills, Greenville, S. C., PC Functional Glass Blocks were used with Vue block inserts for vision. Ventilators were also included in some of the panels—making this installation a practical example of the †PC Vision-Lighting Plan.

†The PC Vision-Lighting Plan is a construction for daylight openings consisting of orientation-keyed areas of PC Functional Glass Blocks (selected for sun or non-sun exposure) used with vision-ventilation areas as required.



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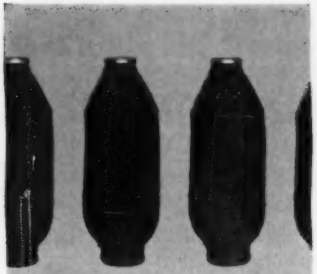

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News OF THE MONTH

Acetate Stands Alone. The Federal Trade Commission has proposed revised rules that fibers, yarns, and fabrics made from cellulose acetate need no longer be referred to as "acetate rayon." Such materials can now be referred to merely as "acetate." The differentiation between viscose rayon made from regenerated cellulose and the cellulose-acetate type climaxes a long fight for recognition by both Celanese Corp. of America and Tennesee Eastman Co.

Fabric "Liveliness." Liveliness of fabric can now be measured by a device that was described at the recent American Chemical Society textile symposium by J. W. Ballou of E. I. du Pont de Nemours & Co., Inc. In the instrument a 2½-in. fabric sample is tightly folded on a ⅛-in. radius and allowed to spring back through a light beam. Measurement is made of the time it takes the leading edge of the fabric to traverse an inverted 180° angle. Correlation of fabric thicknesses, construction, and inherent yarn constitutions to a common denominator is rapidly being worked out.

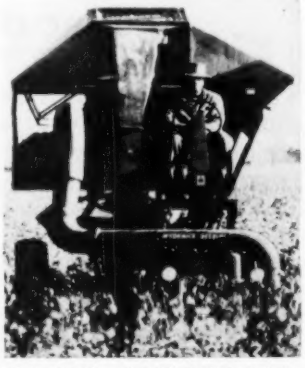
Improved Mercerization Method. An improved way of mercerizing cotton fabrics that consists of pretreating the cellulose present with an organic liquid of small molecular size (trichloroethylene, dichloroethylene, or carbon tetrachloride, for example) will increase the strength of such fabrics 20 to 25% and will cut down on mercerization time and chemicals by up to 50%. Such are the conclusions of Dr. Joseph Seiberlich, research associate professor at the University of New Hampshire College of Technology, Durham, N. H., discoverer of the patented method. The pre-treatment organic liquids penetrate the fiber cores and facilitate subsequent mercerization and dyeing penetration. Resulting sheen and shades are thus improved. The patent has been assigned to Research Corp. of New York.

TEXTILE CALENDAR

• See page 187 •

Vat-Dye Improvement. More efficient and less expensive vat dyeing can now be obtained by continuous scientific control of the chemical reactions that take place in the bath, General Dyestuff Corp. has made known. A new method has been developed by D. E. Marmon and J. H. Hennessey of GDC that is to be known as the "Marhen" process. Titration and indicator papers are replaced by electronic measurement of the reduction potential that governs the dyeing efficiency of the bath. Precise dyeing formulas can from now on save a plant a lot in raw materials, especially in vat-dye reducing agents and in caustic soda and sodium hydrosulphite, as well as eliminate the cause of many faulty dyeings.

U. S. Wool Picture. Wool textile products worth $2,000,000,000 were produced in the U. S. last year, F. Eugene Ackerman, president of The Wool Bureau, declared recently in an address before the Boston Industrial Conference. These wool products were converted into consumer products worth from $6,000,000,000 to $6,500,000,000. Sharp drops in this country's sheep population, from 50,000,000 in 1940 to 28,000,000 last year, and the loss of valuable grazing lands in the Far West are creating an increasingly serious problem in the face of growing markets for wool, the speaker said. Since World War II, per-capita consumption of wool in the U. S. has reached a point 73% above



MECHANICAL COTTON PICKER (spindle-type), costing over $10,000 complete with tractor has been used in the Mississippi River Delta area more and more since World War II—until this year about 25% of the Delta crop is being harvested mechanically. ***The number of man hours needed to pick an acre of cotton has thus been reduced from 100 hr. to about 3 hr. This year some 17% of the nation's total cotton crop is being harvested mechanically.***

"Some 15,000 employees in all branches of our organization are taking advantage of the Payroll Savings Plan..."

SPENCER LOVE
Chairman of the Board, Burlington Mills

"The Payroll Savings Plan is one of the important personnel services offered to the employees of our company. At the present time some 15,000 employees in all branches of our organization are taking advantage of this splendid plan for systematic savings. In times of national emergency this plan assists in stabilizing the economic life of the employee, the community and the nation."

Last call for the 1951 Defense Bond Campaign!

While the campaign was scheduled for six weeks, beginning Labor Day, the *accounting period* will include all Payroll Savings Plan bond purchases and enrollments in September *and October*.

If *you* haven't conducted a person-to-person canvass to put a Payroll Savings Blank in the hands of every man and woman in *your* company there is still time to join the thousands of companies which have added nearly a million employees to the Payroll Savings Plan through person-to-person canvasses.

Phone, wire or write to Savings Bond Division, U. S. Treasury Department, Suite 700, Washington Building, Washington, D. C. Your State Director will give you all the help you need—application blanks, posters, envelope stuffers, personal assistance.

Give your employees an opportunity to save for their future and at the same time, help to maintain America's economic security—put an application blank in their hands.

Results of a few recent person-to-person canvasses

Firestone Tire and Rubber Company (40,000 employees), 87% participation; Universal Atlas Cement Company, 67.8% of 4,789 employees . . . Martha Mills, 71% of 2,200 employees . . . Lit Brothers, 52% of 3,600 employees . . . Delta Air Lines, 65% of 2,100 employees; Aerojet Engineering Corporation, 78.1% of 2,000 employees . . . Brown-Lipe Chapin Division of General Motors, 87% of 1,750 employees; Fabricast Division, General Motors, 85% of 1,700 employees.

Person-to-person canvasses now under way include:

	Number of Employees
38 Major Railroads	993,142
Radio Corporation of America	40,000
Owens-Illinois Glass Company	25,000
Cudahy Packing Company	17,000
Pacific Gas and Electric	17,000
Willys-Overland	6,750
Owens-Corning Fiberglas Corp.	6,500
White Motor Company	6,500
Fruehauf Trailer Company	5,700

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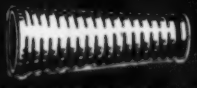
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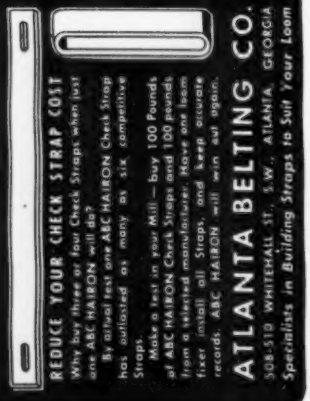
No bother, no worry, no waste when you buy our loom stripping.
"CUSTOM-TAILORED" because each strap is identically uniform and fits your loom.

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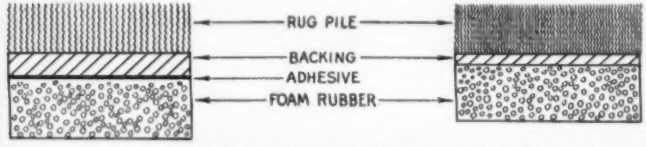
Orlon Dyeing Improved. More economical methods of dyeing Orlon acrylic fiber were recently reported by Alexander B. Roy, director of research at Dean & Sherk Co., Lawrenceburg, Ky., in a recent paper presented before the Midwest Sect., AATCC. The new type-41 Orlon staple and type-81 continuous filament can be dyed by a method similar to that used for dyeing dynel. The washfast cuprous-ion method is used, and excellent results have been reported. Several vat colors dye Orlon at high temperatures and give deep shades, but the method is expensive compared with the new cuprous-ion method. Previously it was possible to dye Orlon only in pastel shades with acetate-type dyes and conventional methods.

Dacron Dyeing Discussed. In the commercial dyeing of Dacron polyester fiber only acetate, developed-acetate, and certain azoic types can be applied practically, at 205 to 210° F., Dr. S. G. Turnball, Jr., E. I. du Pont de Nemours & Co., Inc., told the Piedmont Section of the AATCC recently. Vat dyes are practically applicable only at 250° F. At 212° F. certain acetate dyes show fairly good affinity, but most show poor concentration. When applied at 250° F., however, acetate dyes on Dacron approach the wet fastness of vat colors on cotton. Since only 10 to 12 commercial dyers in the U. S. can do pressure dyeing, the use of carriers to swell the polyester fibers and permit dye penetration is so far the only commercial answer to open dyeing, the speaker concluded.

Metallic Finishes. If the right size of metal compound, somewhere near 9 microns, is applied to fabric surfaces as a reflectant, insulation properties of the fabric will be increased by about 15%, Dr. L. P. Herrington of Yale University told the textile symposium of the American Chemical Society at its diamond-jubilee meeting in New York. Binder materials used also have an significant effect on the heat reflectance and insulation properties of the fabric. Another important consideration is the construction of the finished garment and its ventilation or lack of it.

French Weavers Lay Plans. Members of the French cotton-weaving team that explored U. S. productivity methods this fall have returned to France full of hope for doubling cotton-weaving production and for improving workers' wages in their homeland. The Frenchmen were much impressed with the warp-yarn poundage obtainable by mills equipped with Barber-Colman spooling and warping, with the amount of care that goes into cotton slashing, with the easier standardized maintenance that is possible with both C & K and Draper looms, and with continuous-process cloth finishing. M. Paul Delecluse, leader of the group, called for a more liberal exchange of technical ideas between France and the U. S., and also for more even-running cotton to be sent to France to help French mills obtain higher productivity and better quality control.

Bonded-Fabric Techniques. From a few thousand pounds in 1945 to 15,000,000 lb. annually today is the record of non-woven fabrics in the U. S., Howard E. Shearer of Textile Research Dept., American Viscose Corp., Marcus Hook, Pa., told the Textile Div., ASME, in Philadelphia recently. A method has been developed for drawing through the web high-strength elastic ribbon to promote elasticity in the transverse width of the bonded fabric and to give higher machine-direction strength. A sateen-face type of non-woven ribbon can now also be produced in a continuous dyeing, drawing, and finishing operation. Under suitable heat and pressure, an acetate-yarn warp face can be applied



USE OF ADHESIVE in old method (left) of integrating foam-rubber backing with carpeting has been eliminated in a new process (right) developed by Collins & Aikman Corp., New York. The new method applies the foam-rubber composition directly to the carpeting in the form of a thick cream that solidifies into a foam-rubber pad to become an integral part of the carpet. Denser weaves and lower pile heights are thus possible. No binding of edges is necessary. Color can be incorporated in the foam rubber to match the carpet color.

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CUSTOM-BUILT LABORATORY EQUIPMENT

to a non-woven fabric backing, and dyestuff can then be padded on.

Rayon-Fabric Stabilization. Rayon-fabric shrinkage-control methods should be used carefully to prevent lowered resistance to tear and abrasion in the finished product, Jack Epelberg of Cluett, Peabody & Co. told the Division of Cellulose Chemistry of the American Chemical Society at its diamond-jubilee meeting in New York. Stabilizing agents often used cause a change in the rayon-fabric properties, especially in stress-strain relationships. Three kinds of shrinkage control discussed were mechanical inhibition, cross linkage, and inhibition of swelling. Formaldehyde shrinkage control presents difficulties in handling the fabric in large quantities. Glyoxal stabilizing agents appear to be more effective against damage from hard hand washing.

Saco-Lowell Worsted System. The economies of the Saco-Lowell worsted system have not as yet been fully realized because of the relatively small size of installations, Gilbert D. Harrison, Jr., of the machinery firm recently told the Textile Div., American Society of Mechanical Engineers. In Australia, however, a mill has started up eight worsted-system spinning frames with only five girls, including doffers, cleaners, and creel hands. One operator tends the roving frames supporting the eight spinning frames, and one tends the pin drafter. Seven persons thus now do the work that formerly required 21 people. In the U. S., spinners are running eight sides on coarse counts on the SS4 frame.

Hosiery-Worker Pensions. Pension benefits ranging normally from $80 to $165 per month, including Social Security benefits for workers without dependents, have been set up for eligible members of the American Federation of Hosiery Workers by the Hosiery Industry Employees' Pension Fund. Without Social Security benefits, the normal pension spread under the plan is $30 to $65 per month. The fund is financed solely by employer members, a majority of whom are members of the Full-Fashioned Hosiery Mfrs. of America, Inc. Each fund member pays a 4% contribution based on its weekly payroll. Approximately 11,000 hosiery workers in about 40 mills are covered by the agreement.

French Dyers Report. The efficiency and high productivity of American textile dyeing and finishing plants come mainly from (1) excellent plant organization, (2) streamlined production methods and equipment, and (3) a spirit of enterprise and productivity, 13 French dyers and finishers agreed after a recent 6-week study of U. S. methods under the auspices of ECA. Efficient technical organization has been obtained through "a spirit of analysis," through training of "all personnel at all levels," and through constant research looking toward "simplification in all phases of textile endeavor." Several dyers were impressed with continuous-process methods that handle dark colors. The team will disseminate its impressions and conclusions throughout France by means of reports, meetings, lectures, and personal movies—as well as by ECA-provided material.

Opening and Picking Session. A full-day session on opening and picking for a 50,000-spindle print-cloth mill will be held by the Textile Section, American Society of Mechanical Engineers, at the ASME annual meeting at Hotel Chalfonte-Haddon Hall, Atlantic City, N. J., the 30th of this month. The discussion will cover opening and picking of 12,000 lb. of strict-law-middling cotton, and production of 60% 30s warp, 40% 40s filling yarn to be woven on 120 looms. Quality of finished product, waste, treatment of exhaust air, and layout of buildings and machinery will be covered.

Papers will be delivered by Paul G. Grant, Jr., Whitin Machine Works; and Robert S. Cunley, Saco-Lowell Shops. A symposium on the subject will be conducted by J. J. McElroy, Marenick Mills; Charles Parsons, Chicopee Mfg. Co.; and others. The luncheon speaker will be Joseph H. Leahy, Director of Research, Valkart Bros.

Mill-Maintenance Discussion. Maintenance problems in textile mills will be discussed at one session of the third plant-maintenance conference to be held concurrently with the Plant Maintenance Show. The show is scheduled for Jan. 14 to 17, 1952, at Convention Hall, Philadelphia, Pa.

The conference plans the most extensive examination of maintenance problems ever undertaken. Thirty-four separate discussions will be conducted. More than 100 experts, drawn from industrial firms all over the country, will lead the panels. Ten thousand maintenance executives are expected to attend the show and conference.

Six general conferences, 27 sectional meetings, and the annual banquet are scheduled. General conferences will consider basic problems of all industry while the sectional meetings will be

(*Continued on page 332*)

DON'T SWEAT OVER WET PLANT DETERIORATION ...RUST OR FUNGUS

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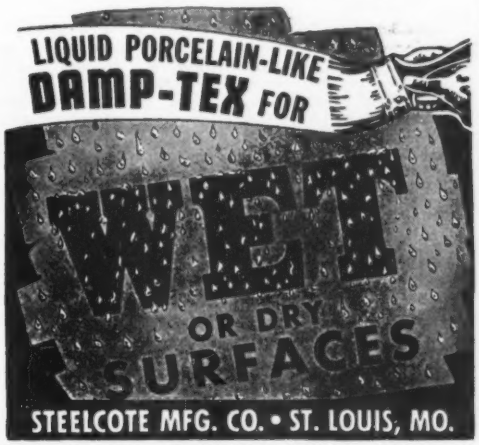
The Damp-Tex system of painting stops rot, rust, bacteria and fungus growth. Puts a porcelain-like finish on wet or dry wood, metal, concrete and plaster with equal ease and efficiency. Damp-Tex resists steam, 2% caustic solution and lactic acid. Comes in white and colors. Used in over 8,457 plants. Send for details of our trial offer "AA".



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More and more laundry operators have come to realize that soft water is a "must" for efficient operation, for cleaner bundles, for satisfied customers. Only question is, how—with present water-softening equipment—to 1) get *more* out of it, 2) get it at *lower cost*. Now, with Permutit's new automatic controls and new high-capacity zeolites you can realize these *new* "musts" of soft-water production.

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NEWS ABOUT Suppliers

Equipment Suppliers

H. W. Butterworth & Sons Co., Bethayres, Pa., has appointed Stanley W. Brooks chief engineer of the firm. Since 1944 he had been assistant sales manager of the New England office, while last year he worked at Bethayres.

Coleman-Rowe, Inc., Salisbury and Charlotte, N. C., has been formed by Walter S. Coleman and Richard D. Rowe to represent Meadows Mfg. Co. and Specialty Hardwoods Co. Mr. Coleman was for seven years North Carolina agent for Meadows, and Mr. Rowe was for four years a field engineer with the same firm.

Crescent Corp., Fall River, Mass., has appointed Montgomery A. Simons to be in charge of sales at Fall River, succeeding Leon Bakst, who has left the company. Mr. Simons was formerly resident manager of the Waynesboro, Va., plant of Wortendyke Mfg. Co.; and up to 1948 was executive vice president of former Esmond Virginia, Inc.

Hunt Loom Works, Inc., Greenville, S. C., has made H. Haley Ector its sales representative in Georgia and Alabama for company loom parts. He had been associated with West Point Mfg. Co. and National Ring Traveler Co.

Link-Belt Co., Chicago, Ill., has elected Robert C. Becherer executive vice president. Named vice president only last March, Mr. Becherer had been general manager of the company's Indianapolis, Ind., plant since 1947. Richard E. Whinrey has been appointed general manager at Indianapolis to succeed Mr. Becherer.

Edward J. McBride Co., Philadelphia, Pa., has opened an office in Charlotte, N. C. James E. Oliver, associated over 25 years with Allen Beam Co., is in charge.

Package Machinery Co., East Longmeadow, Mass., has made known the retirement of George A. Mohlman, chairman of the board since 1948, a company executive since 1926

HARRELL J. AUTEN, field engineer of Bijur Lubricating Corp., Rochelle Park, N. J., has been assigned to Newnan, Ga. He was previously a company field engineer operating out of Charlotte, N. C.

and a member of the firm since 1918.

Proctor & Schwartz, Inc., Philadelphia, Pa., has opened a new sales and service branch for the textile-machinery division. The new shop is located just outside of Spartanburg, S. C., on the main highway to Greenville. Walter Egbert is manager.

Raymond Corp., Greene, N. Y., has acquired a modern plant at nearby Morris, N. Y., from the Linn Mfg. Corp. Hydraulic elevating tables, sheet-feeding tables, high-lift trucks, and elevating equipment manufactured at the new plant will raise over-all company production by 70%.

Saco-Lowell Shops, Biddeford, Me., has announced the resignation of John S. Chafee, vice president and director. He will continue as consultant for the company as needed. Elmer J. McVey, who has been with the company since early this year, succeeds Mr. Chafee. Sven Vaule, consulting management engineer, who discontinued private practice in 1949 temporarily to become Saco-Lowell works manager, has also resigned to resume his general business. W. A. Thomason,

MR. RAYON FIBRE SEZ:

GET BETTER WEAVING PERFORMANCE — WITH

GENERAL MILLS FibRsiZ!

(NEW WHEAT STARCH SIZING FOR SPUN RAYON)

Now—you can have the smooth spun rayon warps you've always wanted—on blends too! And without increasing your sizing costs! Just use General Mills' new FibRsiZ—a NEW kind of starch—all wheat—for starching your spun rayons.

You cut way down on your softeners to reduce harshness because FibRsiZ film is strong, smooth and flexible, yet has excellent rinsibility which gives you fast, easy and economical removal.

General Mills FibRsiZ is stable under agitation. Its viscosity remains the same—neither thinning out nor forming hard size even when run in the slasher box at 180° F!

General Mills FibRsiZ is sold in 100 lb. multi-wall bags.

Send for free sample today! See how new General Mills FibRsiZ can improve your weaving operation at lower cost to you!

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FOR

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STANDARD EQUIPMENT

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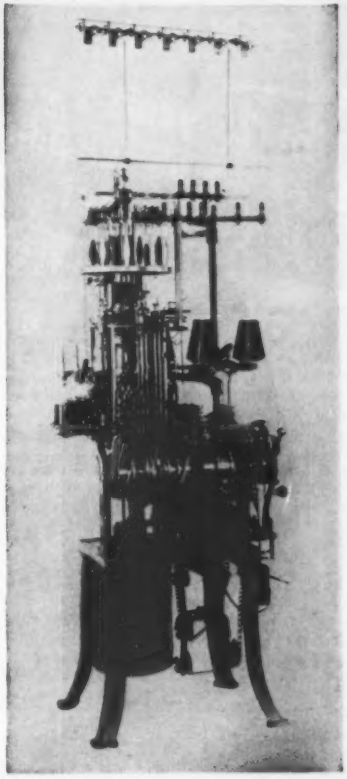

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WESCO Engineers keep pace with the development of all new knitting machines. WESCO electric stop-motions are built in any series from 1 to 96 ends including Retractable electric needle protectors—safety controllers—hole and press-off detectors and Sentinal Press-off detectors. Manufacturers and knitters alike recognize WESCO "know-how" and "how". Specify WESCO and you get the finest.

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on all these knitting machines:

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Another of a Series of Knitting Machine Builders. Others to follow.

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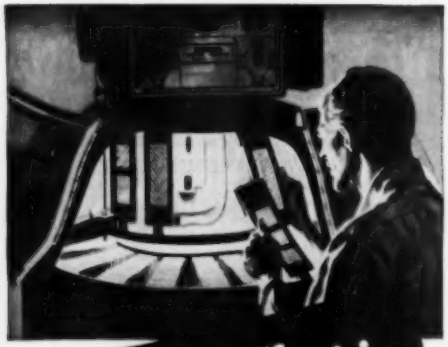


For 25 years . . . 5 weeks of sunshine every day!

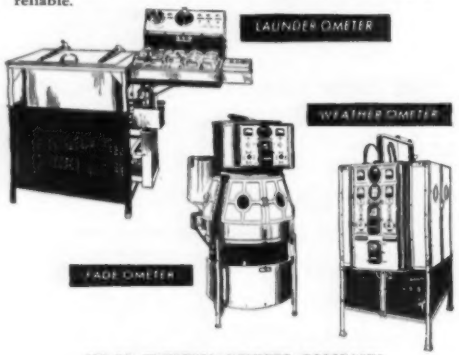
In January of 1924, General Aniline & Film Corporation purchased its first Atlas Fade-Ometer for use in the company's research laboratory as the means for testing the light-fastness of General Aniline dyestuffs under accelerated conditions. In 1949 this same machine—after 25 years of dependable use—was turned in to us on the purchase of a new machine which immediately took its place alongside the many other Fade-Ometers bought by General Aniline (The Model FDA pictured above was purchased in 1940) during the intervening years.

By subjecting product samples to Fade-Ometer testing, General Aniline technicians can accurately foretell how dyed materials will wear and look in any climate and however used. Thus, the General Aniline reputation for quality is carefully protected at all times.

* * *

The source of light in the Fade-Ometer in the photo is still as reliable as it was on the day the machine was delivered, and is still the most accurate reproduction of Noon June sunlight ever devised.

Throughout the years, however, Atlas has maintained its own research program dedicated to improving the entire line of Atlas-Ometers—the Fade-Ometer, Weather-Ometer, and Launder-Ometer. The result has been machines that are simpler to operate, faster in providing results, more economical, and as always—thoroughly reliable.



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News About SUPPLIERS (Continued)

OLIVER D. LANDIS (left) has been made sales representative in North and South Carolina for Benjamin Booth Co., Philadelphia, Pa. Norman Aderhold of the Philadelphia office will from now on concentrate his activities in the Eastern area. At the same time, CHARLES G. STOVER (right), West Point, Ga., has been appointed exclusive sales agent for Georgia and Alabama.

Jr., former Southern Editor of TEXTILE WORLD, has joined the firm as a sales engineer attached to the Charlotte, N. C., office. William Ashton is now representative and service manager for Saco-Lowell in South America.

Signode Steel Strapping Co., Chicago, Ill., has transferred J. R. Elsinger of Atlanta, Ga., to the company Baltimore district. He will reside in Richmond, Va., servicing part of Virginia and all of North Carolina. He has been with the firm two years.

Square D Co., Milwaukee, Wis., recently named R. C. Quick manager of its Charlotte, N. C., district, replacing Sam Hartness, who has been transferred to the Chicago office. Mr. Quick had been in charge of the Saginaw, Mich., office. R. M. Ferguson has been added to the Charlotte sales force.

Standard Mill Supply, Inc., Charlotte, N. C., has been appointed Southern sales representative for J. E. Windle Machine Works, North Grafton, Mass.

Vesco, Inc., Charlotte, N. C., has been formed as a materials-handling agency. The company represents Divine Bros. Co. in the sale of truck-caster and wheel products in North and South Carolina. C. Clarke Vaneman, former Divine Bros. associate, is the incorporator.

Westinghouse Electric Corp., Pittsburgh, Pa., has undertaken an expansion program extending beyond 1953. A first post-war expansion, announced in 1945, was completed in 1948 at a cost of approximately $150,000,000 and increased manufacturing facilities by 50%.

Watson & Desmond, Charlotte, N. C., has completed a sales agreement with Mona Industries, Paterson, N. J., for the sale of Mona products in North Carolina, Virginia, West Virginia, and Tennessee. The Charlotte firm has also been named Southern selling agent for Chemicolloid Laboratories, New York.

Winsor & Jerauld Mfg. Co., Inc., Providence, R. I., recently named Edward Wharmby manager. Matthew W. Zuck is assistant manager. Thomas C. Roberts has resigned as vice president and general manager.

Chemical and Yarn Suppliers

American Viscose Corp., New York, has made the following appointments: Marvin P. Long, department head of filament division at Roanoke, Va.; Raymond L. Watrous, Jr., staff engineer at Roanoke; J. Reid Durbin to the staple-sales division in New York; and William W. Bowman to the position of assistant to head of the cotton division at Textile Research Dept. at Marcus Hook, Pa.

Atlantic Chemical Co., Inc.,

? ? QUESTION ? ? IMPORTANT ! !

What are your WEEKLY Maintenance costs?

are you operating { DRAPER LOOMS For $1.25 / C & K LOOMS For $2.50 ?

OPERATOR TESTING SHUTTLE TENSION

IF NOT "TENSION-RITE"

IS THE ANSWER!

After 6 months, with proper 3-shift constant use, *your* maintenance cost can be that low—maybe lower—and better QUALITY FABRICS attained!

"Tension-Rite" is an instrument that has opened up scientifically the most neglected phase of yarn and cloth manufacturing."—to quote from a prominent loom builder.

It enables you to test in Laboratories, Weave Rooms and other departments under any *constant speed*, any type yarns thru any type or make-up of tensions used. Speed ranges for most any requirement can be had.

It is simple, but thorough. Operators can be trained in its proper use in a very few hours. Over 250 single shuttle looms can be tested and checked in 8 hours.

Already Tested and Proved in Well Known Southern Mills

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Patent No. 2,407,545 with other patents pending.

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Have gone into textile mills throughout the country since 1920—with complete satisfaction to mill operators.

When you think of floors, remember to specify Holt Flooring, made from Northern Wisconsin-Michigan Hard Maple.

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Remove starch quickly...cheaply ... completely. Exsize-T is the *most efficient . . . most economical* of all desizers. Effective over a wide temperature range.

Safe! *Exsize-T* is not a harsh chemical—but a liquid enzyme concentrate. Harmless to synthetic or natural fibres. Easy to apply. Write now for free booklet.

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News About SUPPLIERS (Continued)

WILLIAM G. POLLEY (left) has been appointed district sales manager at Atlanta, Ga., for Acme Steel Co., Chicago, Ill., to succeed the late Clarence A. Carrell. With the company since 1924, he has served in the South for 21 years. His new territory includes Alabama, Florida, Georgia, and Tennessee. Replacing Mr. Polley as Southern-area special representative is HARLES R. LAMMERS (right), transferred back to the South from Buffalo, N. Y.

Centredale, R. I. has appointed T. W. Kitchen of Greenville, S. C., its Southern sales representative. He was previously associated with Rodney Hunt Machine Co.

Canadian Industries Ltd., Nylon Div., Kingston, Ont., is to be expanded to twice its present capacity. Production from a new nylon basic-chemicals plant to be erected between Brockville and Prescott, Ont., will be entirely absorbed by the Kingston expansion. Completion of both projects is seen by mid-1953.

Carbic Color & Chemical Co., Inc., New York, has recently been named representative in New England, the Mid-Atlantic states, and Canada for dyestuffs produced by Otto B. May, Inc., Newark, N. J. Dyer S. Moss Co., Charlotte, N. C., continues to represent both the Carbic and May organizations in the South.

Celanese Corp. of America, New York, has made known that its Edmonton, Alta., plant, in addition to industrial-chemicals production, will include units for the production of cellulose acetate, acetate staple, and filament yarn. Formaldehyde, acetone, and acetic acid required in the cellulose-acetate operation will also be produced.

Chemstrand Corp., Decatur, Ala., has appointed James H. Crow, Jr., presiding judge of the eighth judicial circuit of Alabama, to the position of administrative assistant to the president. Arthur W. Lucas has been named assistant treasurer to Howard C. Greer. James L. Bixby has been made director of public relations.

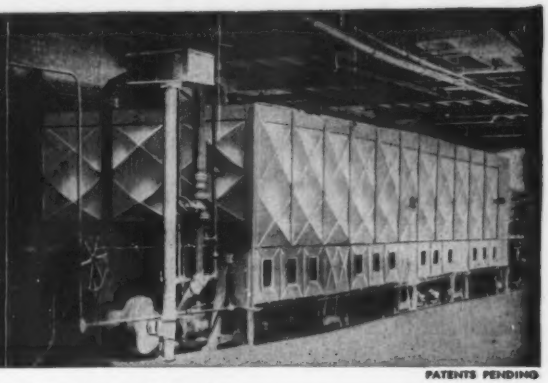
E. I. du Pont de Nemours & Co., Inc., has announced the retirement of Cantwell Clark, manager of the planning section of the nylon division. He joined the company in 1915. W. Laird Stabler, manager of personnel and industrial relations of the rayon department for six years, has been appointed head of an organization-planning division in the employment-relations department. William R. Creadick succeeds Mr. Stabler in his former position. W. W. Ransom has become technical director of the rayon division at Yerkes Works, Buffalo, N. Y., succeeding E. M. Hicks, Jr., now technical superintendent of the Old Hickory, Tenn., rayon plant.

Nopco Chemical Co., Harrison, N. J., has appointed Laurence E. Rossiter its New England district sales manager. He replaces Harold J. Waldron, retired. With the firm for over 10 years, Mr. Rossiter was most recently a technical sales representative in southern New England. Thomas Fahey replaces him in an appointment as a member of the southern New England sales force for the company industrial division.

Nuodex Products Co., Inc., Elizabeth, N. J., has made Robert C. Brumberger manager of fungicide sales. Mr. Brumberger will supervise company agents in contacts with

Another "first"!

CARBOMATIC "UNA-RAY" OVEN



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Greatly increased efficiency! For example: *40* linear feet of "Una-Ray" Oven equal the productive capacity of *70* feet of a conventional oven-type. Saves thousands of dollars in equipment cost and operational economies. No burning, scorching, spotting or marking of goods. No crocking. No "gas fading" or color migration. Uniform color is insured. A general-purpose oven (of any capacity needed) that provides accurately-controlled working temperatures up to 550°F. For drying; drying and curing in one operation; resin fusing; Nylon setting, etc. *Write for Bulletin TW-11.*

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For perfect card grinding

DRONSFIELD PATENT MOTOR-DRIVEN FLAT GRINDING MACHINE No. 207

★ Designed for grinding revolving flats—four simultaneously—dismounted from the cards. Absolute precision setting is the aim.

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Isotta Fraschini

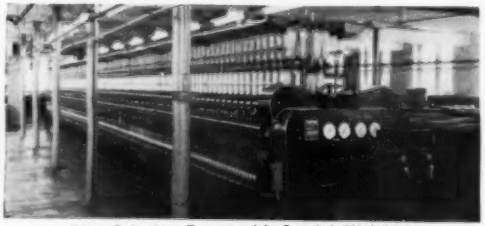
CONTINENTAL COMBING AND SPINNING MACHINERY FOR

WOOL - BLENDS - SYNTHETICS

Installations at Susquehanna Mills, Philmont, N. Y.

Heavy duty 7-head Intersecting Gill Box for Precombing operation.

Heavy duty 5-head Intersecting Gill Box with Can Delivery for Wool and Synthetics. In background, installation of rectlinear combs



Ring Spinning Frame with Special Highdraft

Photos Courtesy Susquehanna Mills, Inc.

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News About **SUPPLIERS** (Continued)

W. E. WYCHE, recently resigned as vice-president of Southeastern Factors, has been appointed Southern manager of Coleman & Co., New York, with offices in Charlotte, N. C. Mr. Wyche was formerly general manager of the textile division of W. J. Voit Rubber Corp., Gastonia, N. C.

DON W. LYON, former district sales manager at San Francisco, Calif., for Libbey-Owens-Ford Glass Co., Toledo, Ohio, has been named manager of textile sales in the new fiber division of the company. Mr. Lyon, with the company since 1938, will have offices in Toledo.

textile men and will also serve in a technical advisory capacity.

Pennsylvania Salt Mfg. Co., Philadelphia, Pa., has opened a district office in Atlanta, Ga. J. Howard Morrison has been made district sales manager.

Solvay Sales Div., Allied Chemical & Dye Corp., New York, has appointed Dr. C. S. Fazel its president. Director of development is now Dr. E. C. Crittenden. Neal M. Draper former manager at St. Louis, has been made New York manager of the ammonium- and potassium-products department. Harry R. Stoothoff is now manager of the special-alkalis and cleansers department.

Other Services

Barnes Textile Associates, Inc., Boston, Mass., has established a new division in New York to be under Peter M. Fekula, former member of a New York management-engineering concern.

Carded Yarn Assn., Charlotte, N. C., at its recent annual meeting elected the following officers: Halbert M. Jones of Waverly Mills, president; D. L. LaFar of the LaFar group of mills, vice president; E. Owen Fitzsimons of Charlotte, executive vice president (re-elected); and Juanita Nixon of Charlotte, secretary (re-elected).

New England Textile Foundation, Providence, R. I., draws readers' attention to the fact that its four-year scholarships have a value of $2,000 for four years ($500 per annum), and not $2,000 per annum as erroneously reported in TEXTILE WORLD, Sept. '51, page 308.

Bruce Payne & Associates, Inc., Westport, Conn. has appointed Howard S. Stevenson a senior associate. Mr. Stevenson was for four years an industrial engineer with Deering, Milliken & Co., Inc., Greenville, S. C. He will continue to work with Rhett Ball, manager of the Bruce Payne Southern division, and will live in Greenville.

Office of the Quartermaster General, New York, has been expanded. Brig. Gen. H. L. Peckham is now Acting Deputy, The Quartermaster General. Brig. Gen. R. P. Hollis is now Commanding General. Brig. Gens. A. L. Marshall and Ira K. Evans have been named Acting Assistants, The Quartermaster General. The reorganization also envisions at a later date the establishment of a research division, an office of plans, a procurement division, and a distribution division.

Werner Textile Consultants, New York, has moved its planning and research department to Larchmont, N. Y. The financial section of the company and a new conference room remain located as before in the same New York building.

THE "HEART" OF THE NEW HEIM *Unibal* SWEEPSTICK

Instead of an oversized stud hole which elongates during operation, the new HEIM Sweepstick has a Spherical Bearing consisting of an SAE 52100 chrome steel ball bored to fit the stud, and oscillating in bronze bearing inserts.

Any misalignment is compensated for by this unusual spherical bearing. Shock is absorbed in both directions of the stroke, and a softer and smoother pick action results. Production interruptions due to sweepstick failures are cut to a minimum. You can count on longer life and improved action with this durable HEIM Sweepstick.

Please write for stock list and prices.

THE HEIM CO. HEIM **FAIRFIELD, CONN.**

Duesberg-Bosson WOOLEN CARD and PERALTA MACHINE

(PATENTED)

Shown here: 3-cylinder set, with Peralta Machine. Also available in 2-cylinder and 4-cylinder sets.

All foreign matter entangled in the web as it passes from the doffer is pulverized by the two Peralta Rolls, thereby eliminating this foreign matter from the stock.

BUILT in two sizes, 78¾" and 72¾", this well-known woolen carding machine offers substantially greater production and noticeably improved quality because of inherent design features and operating advantages.

A new 2-cylinder carpet card now in operation in the Duesberg-Bosson Woolen Spinning Co., Jefferson, Mass., is causing great interest.

CATALOG AVAILABLE ON REQUEST

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Manufacturers of Woolen Machinery, Developed from a Background of Over 115 Years

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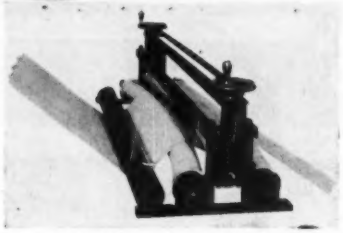
You can

CUT PRODUCTION COSTS AND IMPROVE QUALITY *with*

Mount Hope

ADJUSTABLE EXPANDERS



3-Bar Adjustable Expander. Special brackets to fit minimum space requirements.

All over the world Mount Hope Expanding Devices handle all types of wrinkling, creasing and spreading applications in textile mills. 80% of the mills in the United States use them, and nearly all machinery builders incorporate them on their machines.

Have a Mount Hope Engineer analyze your cloth handling problems—no obligation.

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304 For more information, write direct or use Reader Service post card.

NEWS ABOUT Mills

Cotton Mills

Canadian Cottons Ltd., Montreal, Que., is building a new plant and office at Cornwall, Ont., where it plans to shift its head office. The mill building will be 123x280 ft., two stories with part basement, windowless but with mechanical ventilation. The consulting engineer is Lockwood Greene Engineers, Inc. The cost is estimated in excess of $1,000,000 for the plant and office buildings.

Frank Cooper Rug Co., Scranton, Pa., plans the immediate rebuilding of the portion of its mill that was recently damaged by fire. The loss was reported to be over $125,000, including building, equipment, and stock.

Dominion Yarns Ltd., Welland, Ont., plans to erect a mill and shipping building, 139x138 ft., containing about 24,000 sq. ft. of floor space. Alterations and additions also will be made to the lunchroom and washroom.

Goodyear Clearwater Mills No. 3, Atco, Ga., plans an immediate expansion, including installation of rayon-twisting and weaving units. A 300x280-ft. addition will be constructed. Several hundred additional workers will be needed when the installation is completed.

Greenwood Mills, Greenwood, S. C., has announced plans to build a $6,800,000 print-cloth mill near Greenwood. The National Production Authority has granted a certificate for construction of the new plant, which will have 1,500 looms and will cover about eight acres of land.

Kilburn Mill, New Bedford, Mass., has closed bids for construction of a proposed new mill at Tryon, N. C., which will contain about 60,000 sq. ft. of floor space. Cost is reported to be about $2,000,000. Lockwood Greene Engineers, Inc., Spartanburg, S. C., is the architect and engineer.

James Lees & Sons Co., Glasgow, Va., will construct a cotton-duck plant. The Defense Production Administration has granted the company a $1,344,730 rapid tax write-off certificate to build the new mill.

Murdock Webbing Co., Inc., Central Falls, R. I., has been incorporated with capital of $500,000 to take over and operate the company of the same name.

Pacolet Mfg. Co., New Holland, Ga., has been granted a DPA certificate of necessity for a $1,871,000 expansion program.

Quitman Mills, Quitman, Ga., has begun installation of $500,000 worth of new machinery. The new equipment includes spinning frames and automatic spooling and warping equipment.

Rockmart-Goodyear Mills, Rockmart, Ga., is installing seven new twisting machines.

Scottdale Mills, Inc., Scottdale, Ga., is installing 84 new revolving-flat cards manufactured by Platt Bros. (Sales) Ltd., Oldham, England.

Spray Cotton Mills, Spray, N. C., has asked for construction bids on two additions to its main plant. The additions will be three stories, containing 8,000 sq. ft. of floor space. Type of new equipment to be installed has not been announced. J. E. Sirrine Co., Greenville, S. C., is the architect and engineer.

Spool Cotton Co., New York, N. Y., has let a contract to Enjay Construction Co., Chicago, Ill., for a new one-story factory at Skokie, Ill.

United Cotton Mills Ltd., St. John's, Newfoundland, will begin construction shortly on a new mill that is being established by United States and European interests. The owners are putting up half of the $400,000 cost, and the Canadian government is lending the

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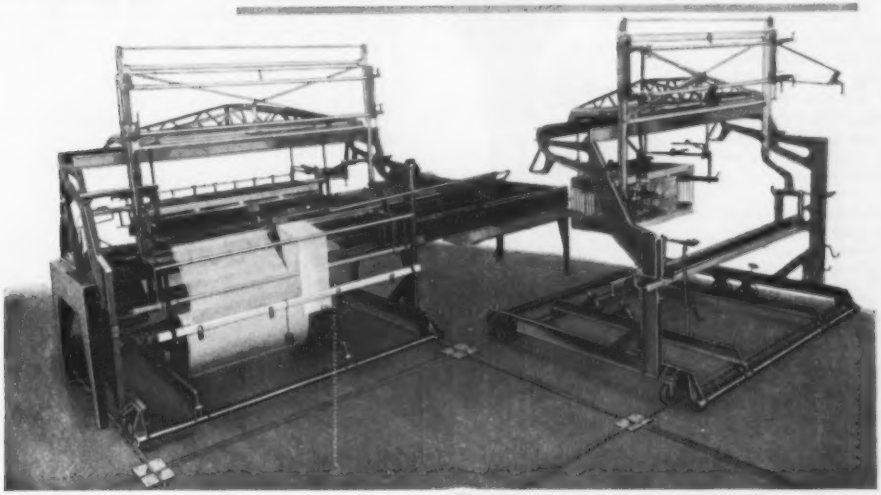

BARBER-COLMAN MODEL F *Warp Drawing Machine*

The Model "F" Barber-Colman Warp Drawing Machine is designed for mills which have a combination of cam and dobby loom work. This particular model is useful to mills that employ 14 to 18 harness shafts or less, with 8 or less banks of warp stop motion. Any mill weaving gingham, shirtings, dress goods and suitings will find this machine exceptionally useful, especially if quick change-overs in style and pattern are common. This model answers a variety of needs in your warp replacement scheme.

Field reports show up to 3000 Ends per Hour
Draws warps from 10 to 300 ends per inch
Draws from flat sheet or 1 x 1 lease
Draws from single or double beam, or split sheet
Draws 1 x 1 lease in double beam or split sheet

Warp threads are drawn through drop wires, heddles and reed
IN ONE OPERATION
from any predetermined draft

HARNESS FRAME LENGTHS	
Size of Machine	Maximum Overall Length of Harness
48	54"
66	72"
86	92"

MODEL "F" MACHINE CAPACITIES
The Model "F" can be furnished in the following capacities at no difference in cost:
Read, 14 Harness, 8 Banks of Drop Wires
Read, 16 Harness, 6 Banks of Drop Wires
Read, 18 Harness, 4 Banks of Drop Wires
DROP WIRE CAPACITY: 9/32" through 3/4" wide

WILL DRAW
- Cotton Yarns
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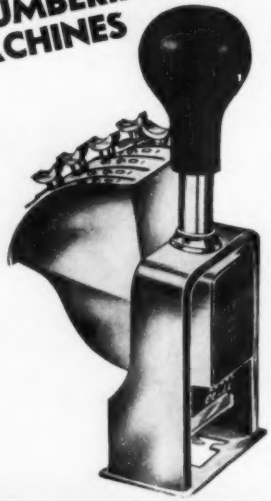
Clear, easily read figures; all-metal, self-inking; will cut costs and prevent mistakes in preparing price tickets and labels. Numbers changed with touch of finger.

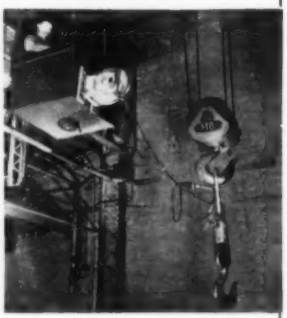
Send for descriptive folder illustrating many printing and numbering machines specially designed for the textile industry.



American Numbering Machine Co.
ATLANTIC & SHEPHERD AVES. BROOKLYN 8, N. Y.

The New Ametron Electronic Scale weighs by *electronics*

- ELECTRIC LOAD CELLS
- REMOTE INDICATION
- PRINTING RECORDERS
- LOW MAINTENANCE



Picture shows 10,000 pounds capacity crane electronic scale used in shipping department of Harnischefeger Corporation, West Allis, Wisconsin.

Write for illustrated circular "The Way to Weigh"

STREETER-AMET COMPANY
4101 RAVENSWOOD AVENUE • CHICAGO 13, ILLINOIS

News About MILLS (Continued)

balance. Plant equipment will include 5,000 spindles and 225 looms. Production is expected to get under way next spring.

Virginian Textiles, Inc., has moved its plant to Central Falls, R. I., from Willimantic, Conn. Production space has been increased by one-third.

Walton Cotton Mill Co., Monroe, Ga., marked its 50th year in cotton gray-goods manufacturing with an Open House for the public and a barbecue for 1,500 employees, stockholders, suppliers, and representatives of Southeastern Cottons, company selling agent.

West Point Mfg. Co., Lanett, Ala., has converted boilers for steam generation to natural gas in the River View, Shawmut, and Lanett mills. Conversion work is in progress at the steam plants of Fairfax mill and Lanett Bleachery & Dye Works. The changeover is expected to be completed by the first of the year.

Woodside Mills, Liberty, S. C., has awarded a contract for $60,000 to Fiske-Carter Construction Co., Greenville, S. C., for a one-story addition to local mill No. 2. J. E. Sirrine & Co., Inc., Greenville, is the architect and engineer.

Woolen and Worsted Mills

American Woolen Co., New York, N. Y., has purchased a 20-acre tract adjacent to the recently acquired Premier Worsted Mills, Raleigh, N. C. No immediate expansion is planned.

Appleton Fabric Products Co., Appleton, Wis., has let a contract to Robert Smith, Appleton, for a one-story addition, 26x50 ft., on North Richmond St. R. M. Connelly, Appleton, is the engineer.

Bigelow-Sanford Carpet Co., Inc., Thompsonville, Conn., announces that it has borrowed $17,500,000. The company has applied $4,820,000 to cover the balance of a long-term loan made in 1946. Plans are to use $2,500,000 for modernization and expansion of carpet-rayon production facilities of the Hartford Rayon Corp., which is controlled by Bigelow-Sanford. The balance of about $10,000,000 will be applied to the payment of current bank loans.

Dorr Woolen Co., Guild, N. H., has given a chattel mortgage for $250,000 to Mechanics National Bank, Concord, N. H. The mortgage reportedly included a listing of the plant's machinery as well as land surrounding mill. The company did not indicate what the loan would be used for.

Franklin-Tilton Mills, Inc., Franklin and Tilton, N. H., now owned by J. P. Stevens & Co., is completing a rearrangement that will concentrate its carding and spinning departments at Tilton and dyeing and finishing at the Franklin plant.

Garfield Worsted Mills, Inc., Scranton, Pa., a subsidiary of Botany Mills, has moved machinery and equipment from its Wyoming Ave. location to the Marnet Hosiery Mill plant in Moosic, Pa.

F. C. Huyck & Sons, Albany, N. Y., stockholders have approved the $630,000 purchase of the Gay Bros. Co., Cavendish, Vt., mill that contains 40 looms and 80,000 sq. ft. of floor space. About 150 workers will be employed in the manufacture of blankets and coatings.

A. D. Juilliard & Co., Inc., Providence, R. I., is spending $5,000,000 to modernize and re-equip its Atlantic Mills. The modernization is expected to be completed in about a year. Among its features are installation of new looms, spinning frames, preparatory equipment, and new lighting; complete air conditioning of the main mill buildings; and eventual conversion of the direct-current generating plant to alternating current. The mill is installing 116 French ring-spinning frames with 23,200 spindles and is retaining 15,000 mule-spinning spindles and 4,000 Bradford spindles.

Kenwood Mills Ltd., Arnprior, Ont., producer of blankets, overcoatings, and other wool fabrics, is progressing with erection of a new steel, concrete, and brick addition to its main building. The installation of machinery costing $105,000 has already begun. W. H. A. Short is president and managing director.

Gessner adds another surety

to the quality control of your production

Gessner establishes micrometer napping energy control

You can now obtain an accurate measure of napping energy control, thanks to Gessner engineering. Gessner Nappers are equipped with automatic micrometer indicators to tell you exactly the amount of napping energy you are applying. Once determined, you can re-establish the same setting any time, the next day, or next year, and know that you will duplicate the desired nap on whatever fabric you may be finishing.

This energy control will save you precious napper roll setting time. Because of extreme accuracy in measurement, spoilage or uneven goods, from one length of goods to another, is reduced to a minimum.

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News About MILLS (Continued)

Laurens, S. C.—The Laurens Development Board has closed bids on a contract to build a new one-story mill to be occupied under lease by Woonsocket Worsted Co., Woonsocket, R. I. McPherson Co., Greenville, S. C., is the architect and engineer.

Peerless Textiles, Inc., Cleveland, Tenn., recently organized, has acquired purchase options on 250 acres in Black Fox community, south of Cleveland, as a possible site for a proposed new textile mill. Peerless Textiles purchased equipment in the spinning and weaving departments of Hardwick Woolen Mills at Cleveland and is now manufacturing cloth in leased space there.

Alexander Smith, Inc., Yonkers, N. Y., has let a contract to Sherrill-Noonan, Inc., for a new warehouse on Pulaski Highway, Baltimore, Md. Estimated cost is $385,000.

Synthetics Mills

Beacon Textiles of Puerto Rico, Palmer, Puerto Rico, has been sold by Beacon Mfg. Co., Swannanoa, N. C., to Puerto Rico Rayon Mills, Inc. Abe Rose, president of Plaza Mills, Inc., Beavertown, Pa., is president of both Puerto Rican concerns. Plans are being developed to establish dyeing, finishing, and weaving operations.

Burlington Mills Corp., Greensboro, N. C., is installing 72 new revolving-flat cards manufactured by Platt Bros. (Sales) Ltd., Oldham, England.

Century Ribbon Mills, Inc., New York, N. Y., has completed a 15,000-sq.ft. addition to its mill at York, Pa., to house finishing and blocking facilities. The addition, which cost $75,000, supplements previously expanded manufacturing facilities.

Gayley Mill, Mariett, S. C., a unit of Deering, Milliken & Co., Inc., has started production. The mill contains 100,000 sq. ft.

Judson Mills, division of Deering, Milliken & Co., Greenville, S. C., is installing new air-conditioning facilities. The project, expected to cost about $250,000, will include new apparatus towers. General contractor for the project is Daniel Construction Co., Greenville, S. C.

Owens-Corning Fiberglas Corp., New York, N. Y., has its new plant at Anderson, S. C., more than half completed. Daniel Construction Co., Greenville, S. C., is the general contractor.

Spin-Text Ltd., Strathroy, Ont., is now producing worsted and nylon yarns in the former plant of Strathroy Woolen Mills Ltd. François E. Cleyn, president of Spinners Ltd., Huntington, Que., heads the new company; and H. S. Leybourne, president of Artext Woolens Ltd., Hespler, Ont., is vice president. Richard L. Tinker, who is associated with several wool-textile concerns in Quebec, is secretary-treasurer. The firm, located in a building containing 88,000 sq. ft. of floor space, has a modernization program under way.

J. P. Stevens & Co., Inc., New York, will produce both woven and tricot-knit fabrics at a new rayon mill to be erected at Wallace, N. C.

Knitting Mills

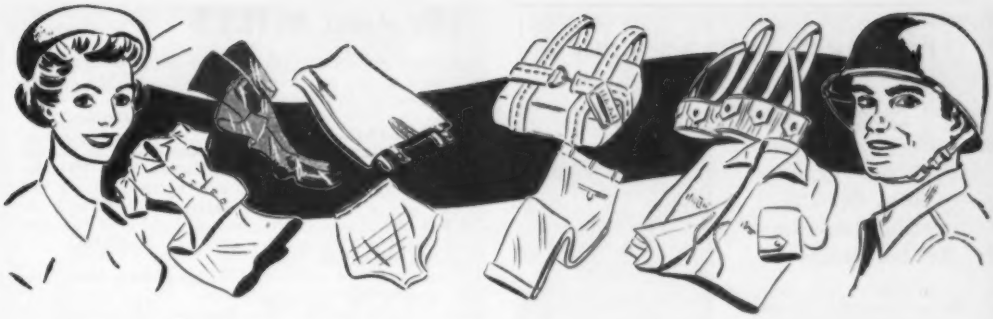
C. W. Anderson Hosiery Co., Clinton, S. C., is planning an expansion program that will increase production 25%.

Beaunit Mills, Inc., Coosa Pines, Ala., has let a contract to Daniel Construction Co., Birmingham, Ala., for additions to local Mill No. 2. Lockwood Greene Engineers, Inc., New York, N. Y., is the architect and engineer.

Draper Hosiery Mills, Clinton, S. C., has plans for an expansion that will increase production 25%.

Grey Mist Hosiery Ltd., Hanover, Ont., is building a 70x30-ft. extension to its mills on Hunter St. Machinery from the present finishing room is to be moved into the new building.

Milltex Hosiery Mills, Philadelphia, Pa., has added four new knitting machines, bringing the total to eight. The plant is producing 1,000 doz.



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Compounded of natural or synthetic rubbers to meet specific requirements.

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News About **MILLS** (Continued)

pr. of stockings per week. The firm plans to add two more machines within the next year.

Pert Hosiery Ltd., Montreal, Que., has let a contract for installation of a high-pressure boiler at its plant in Montreal.

Silknit Ltd., Toronto, Ont., is erecting a one-story plant, 100x200 ft., and an office building 30x100 ft., of concrete-block construction in Collingwood, Ont. The company has also started operations in its new knitting factory at Wiarton, Ont.

Spalding Knitting Mills, Griffin, Ga., is installing five new Komet knitting machines and 21 new loopers. The company is also building a 40x100-ft. warehouse of steel frame with aluminum sheet.

Trim Knit, Inc., New York, N. Y., has purchased the knitting plant of Warner Knitting Co., Clayton, N. Y. All equipment, including motors and winding facilities, will be moved to the New York City plant.

Union Knitting Mills, Philadelphia, Pa., is entering the swim-trunk manufacturing field for the first time since 1936.

Valley Maid Hosiery Co., Kellers Church, Pa., has begun operations with two 51-gauge, 24-section hosiery machines. The company will sell its products direct in flat gray or finished hosiery.

Dyeing and Finishing Plants

Joseph Bancroft & Sons Co., Wilmington, Del., plans an addition to building No. 44. The addition will cover an area 50x90 ft.

Berks Dyeing & Finishing Co., Mohnton, Pa., recently completed a new building that is part of the company's expansion program. Included in the new equipment installed are seven model-31 Paramount preboarding machines and a new Paramount presetting box.

Dyecrafters, Inc., a new yarn-dyeing firm, has been formed at Hingham, Mass., by William B. Luce, former superintendent of dyeing for Emile Bernat & Sons Co. and Garland Knitting Mills, Boston, Mass. David Olken and Benjamin Sesmer are associated with him as chemical engineer and assistant dyer and chemist, respectively. The company will specialize in skein dyeing of yarns for the knitwear and knitting-yarn trade. The plant is located in former shipyards at Hingham. New stainless-steel equipment is being installed.

Geltman Sponging Co., Woonsocket, R. I., a new company, will produce 1,000 pieces a day in certified examining, London shrinking, steam shrinking, decating, waterproofing, flameproofing, mildewproofing, and moth-proofing. Raymond L. Hall is general manager and plant superintendent.

International Dye & Print Works of Allied Textile Printers, Inc., Paterson, N. J., has been sold to Vitromar Piece Dye Works, Hawthorne, N. C. Sale price was around $210,000.

Maury Finishers has begun operations in a new 12,000-sq. ft. plant at Mt. Pleasant, Tenn. The company finishes full-fashioned hosiery. Knitting operations are expected to get under way shortly.

Model Dye Works (Canada) Ltd., Huntingdon, Que., is building an addition to its plant in Huntingdon that will provide approximately 8,400 sq. ft. of floor space. The new addition will house machinery and equipment for wool-top dyeing and other operations.

Palisade Piece Dye Works, Inc., North Bergen, N. J., is purchasing the former Peace Dale Mill property at South Kingston, R. I. The plant has about 300,000 sq. ft. of floor space. Peace Dale's machinery was moved to Rockingham, N. C., in 1947.

Sellers Dyeing Co., Saxapahaw, N. C., recently incorporated with capital of $375,000, will operate bleaching and dyeing plants of Sellers Mfg. Co.

Sirroco Screenprints, Inc., New Haven, Conn., has been incorporated as a subsidiary of Guider Specialty Co. to screenprint textile fabrics in continuous lengths. Operations are limited at present, but plans call for an expansion. The company will also screenprint paper and plastic film.

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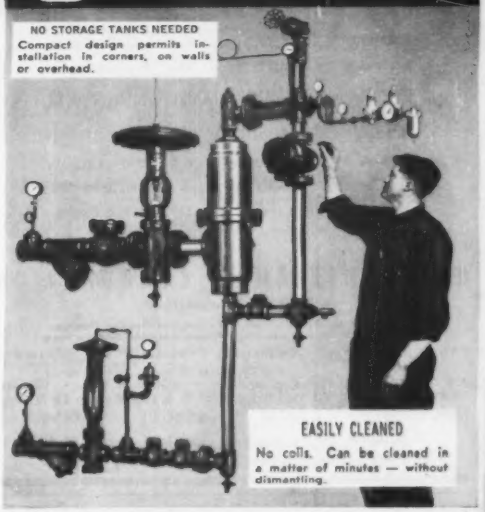
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PICK Heaters are entirely automatic to provide and accurately maintain water temperatures up to 180° F. Water is heated instantly—by steam injection. Exclusive Pressurizer Piston eliminates pipe hammering and shaking. Installation is simple, requiring only ordinary pipe connections. Available in seven sizes with rated capacities of 10 to 200 gallons per minute.

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AND MANY OTHERS

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The Jackson Humidifier head is different. It will not drip. Air cannot back up in the water line. No special tools required for a trial installation—merely replace the old head with the new. Can be connected to any system with gravity water supply.

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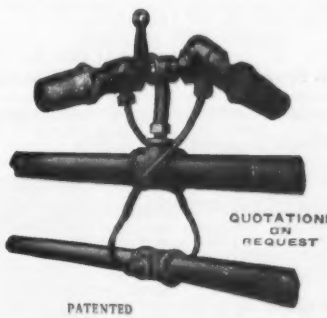

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NEWS ABOUT Men

Monroe A. Adler has been named president of Harrison Mills, Inc., Harrison, N. J., and Granite Fabrics Corp., New York, N. Y. He succeeds the late Max Weinberg.

John Balmer has been made overseer of weaving for a new shift at Plaza Mills, Inc., Beavertown, Pa.

Stephen W. Bastow has retired as superintendent of the dyeing and finishing plant of Textron, Inc., Nashua, N. H. He had been with Nashua Mfg. Co. and Textron since 1901.

Frank Beevers has become overseer of dyeing and bleaching at Marum Knitting Mills, Inc., Lawrence, Mass.

Stanley Black, Union, S. C., has been made general manager of Aleo Mfg. Co., Rockingham, N. C.

Lloyd W. Bland, formerly with Virginia Mills, Swepsonville, N. C., has joined Plaza Mills, Inc., Selinsgrove, Pa., as superintendent. Mr. Bland replaces **J. E. Shotsberger**, resigned.

John Boyd has been promoted to dye superintendent of Shamokin Piece Dye Works, Hazleton, Pa. He was formerly foreman and has been with the company for the past 25 years. Mr. Boyd replaced **Dante Bianchi**, who has resigned.

Darrius W. Broadwell, former superintendent of the Monaghan plant of Victor-Monaghan Co., Greenville, S. C., has been appointed superintendent of planning for the Apalache, Greer, and Victor plants in Greer, S. C., and the Monaghan plant in Greenville. **Otis E. Little** has been appointed superintendent of the Monaghan plant.

Joseph L. Brown has been made overseer of night carding at Hartford Spinning, Inc., Unionville, Conn.

R. Norman Brown has been named manager of Rock Ridge Worsted Mill, a branch of R. I. Dyeing & Finishing Co., West Warwick, R. I.

Herbert P. Bucklin has become superintendent of Sirtex Printing Co., Old Mystic, Conn. He was formerly with Goodall-Sanford Mills, Sanford, Me.

J. H. Butler has been made overseer of spinning at Dartmouth Woolen Mills, Inc., Claremont, N. H. He was formerly with Gay Bros., Cavendish, Vt.

A. M. Burton has resigned as superintendent of Amana Woolen Mills, Amana, Iowa.

Henry Caldrice has resigned as overseer of finishing for Yantic Woolen Mills, Inc., Yantic, Conn.

Robert T. Charlton has joined Bachmann-Uxbridge Worsted Corp., Uxbridge, Mass., as an industrial engineer. He was formerly with Magee Carpet Co., Bloomsburg, Pa.

Roger H. Claggett has become night superintendent for Vermont Textiles, Inc., North Montpelier, Vt.

H. W. Cushman has been named overseer of finishing at Berwick, Me.

Donald Dow has been appointed manager of the Birdsall Bros. Co. plant in Seelyville, Pa. **William Stevens** has been made overseer of weaving.

J. D. Erwin has retired as overseer of the cloth room at Pepperell Mfg. Co., Rome, Ga., after more than 40 years in that position.

George Etters has been named superintendent of weaving for Texas Textile Mills, Dallas, Tex. Mr. Etters has been with Sudamtex de Uruguay in South America for three years. He helped put the weave room in operation there for United Merchants & Manufacturers Corp.

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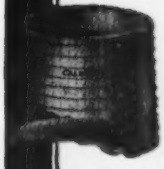

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BEAKER #2
(one liter) Same contents as Beaker #1 but with 5 cc of Versene T added.

PROCEDURE BY STEPS

First, add the caustic to each beaker. Then, to Beaker #2, add 5cc of Versene T. Heat both beakers to boiling point and add the 5cc of the Ferric Chloride to each beaker. Note the difference between the solutions. Beaker #1 (containing no Versene T) is muddy with rust. Beaker #2 is water-white. Next, put a small strip of clean white cotton cloth in each beaker and boil a few minutes. Remove strips and rinse with water. Note the difference. Versene T has kept its strip white in spite of the iron that was added.

Last, take the other rust-stained strip, cut in half and place one-half in Beaker #2 containing the clear solution with the Versene T in it. Boil for a few minutes. Remove, rinse and compare. The Versene T has now restored the rust-stained cloth to its original whiteness.

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News About **MEN** (Continued)

H. GORDON SMITH (left), vice president and general manager of the textile division, has been named to the new post of executive vice president of U. S. Rubber Co., New York, N. Y. WILLIAM E. CLARK (right), assistant general manager of the textile division, has been elected a vice president and made general manager of the division. Samuel R. Phillips has been appointed assistant general manager of the division, Mr. Clark's former position.

Robert Gaunt has resigned as overseer of dyeing for Holland Mfg. Co., Stroudsburg, Pa.

John M. Gayle, Morganton, N. C., has become superintendent of Brookline Fabrics, Inc., Greenville, S. C.

L. H. Girard, manager of the Duplan of Canada Ltd. plant at Montmagny, Que., and **L. E. Moody,** manager of Duplan Dyeing Co. Ltd., Valleyfield, Que., a Duplan subsidiary, were elected directors of the parent company.

Charles Glazier, master mechanic, has resigned from Lebanon Woolen Mills Corp., Lebanon, N. H., to accept a position with Raytheon Corp.

R. C. Gourley, formerly manager of the standards division of Dan River Mills, Danville, Va., has been appointed director of personnel administration for the mills.

Wallace Greaton has resigned as overseer of carding at Acme Cotton Products Co., East Killingly, Conn.

Alfred Greenfield, Jr., has been made superintendent of Arms Textile Mfg. Co., Manchester, N. H.

Silvester Gurvert, of Reading, Pa., has been made manager and superintendent of Berkshire Knitting Co., Andrews, N. C.

Julian C. Harmon, a vice president of Cannon Mills Co., Kannapolis, N. C., has been elected a director, succeeding the late Fabius J. Haywood.

C. Cary Hayward, a cofounder and secretary-treasurer of Verney Corp., Manchester, N. H., has resigned.

Andrew H. Healy, formerly of Ludlow, Vt., has been named overseer of carding for New England Knitting Co., Winsted, Conn.

W. E. Herrick has resigned as night superintendent of Wyandotte Worsted Co., Waterville, Me.

Eldon A. Hopkins has been named overseer of the spinning and carding departments at Verney Corp., Manchester, N. H. He was formerly with Utica & Mohawk Cotton Mills, Utica, N. Y.

T. V. Hughey is now general superintendent at Myerstown Mfg. Co., Myerstown, Pa. He recently resigned as general manager of Gem Rayon Mills, Paterson, N. J.

B. A. Humphrey has been made superintendent of J. O. Ballard & Co., Malone Woolen Mills, Malone, N. Y.

Earl M. Jambura has resigned as assistant superintendent of Prairie du Chien Woolen Mills, Prairie du Chien, Wis.

Herbert M. Kaiser and **Kenneth Collins** have been elected

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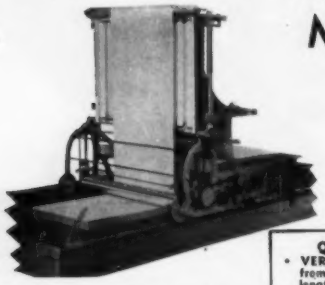

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News About MEN (Continued)

to newly created positions as executive vice presidents of Burlington Mills Corp., Burlington, N. C. **Jack Whitton** has been elected a vice presiden. **Louis Lazare**, vice president, has retired.

Reginald Kent has become overseer of wet finishing at Faulkner & Colony Mfg. Co., Keene, N. H. He was formerly with Springville Mills, Rockville, Conn.

John P. Kolb, formerly a sales engineer with Proctor & Schwartz, Philadelphia, has been named assistant plant manager for Fred Whitaker Co., Philadelphia, Pa., to help handle new departments and the expansion of the company's facilities.

Walter P. Kuffler, vice president and general manager of H. & F. Binch, Inc., Glens Falls, N. Y., has assumed additional duties in New York as director of research and development in Native Laces & Textiles, Inc., parent concern of H. & F. Binch. **Walter Cormuss** has succeeded Mr. Kuffler as plant manager at Glens Falls.

Louis LaChappelle has been promoted to overseer of weaving at Exeter Mfg. Co., Exeter, N. H., succeeding **P. Bonsaint**, resigned.

M. L. Landon has resigned as overseer of knitting at Shorewood Mills, Milwaukee, Wis.

Lionel M. Lavigne has been named overseer of warp preparation, winding, and throwing at Verney Corp., Manchester, N. H. He was formerly overseer at Newmarket Mfg. Co., Lowell, Mass.

John W. Long, Sr., has been promoted from superintendent of the spinning mill to plant manager of Groves Thread Co., Gastonia, N. C. His son, **Fred R. Long**, has succeeded him as superintendent of the spinning mill. **L. Payne has** retired as superintendent of the dyeing and finishing plant. **Joe Shisnant** has succeeded him.

Horace Lovern, formerly in charge of the dye department at the liquidated Walker County Hosiery Mills, has joined Rome Hosiery Mills, Rome, Ga., as foreman and head dyer.

A. Lee McArthur, Jr., who has been administrative manager of Burlington Mills Corp., Greensboro, N. C., since March of this year and controller since January, has been elected a vice president of the corporation. He will retain his present duties.

Wilbur McFeely has been named director of industrial relations for Riegel Textile Corp. and Riegel Paper Corp., New York, N. Y. Mr. McFeely, who has been assistant director since 1945, succeeds **Gerrett R. Schenck**, who is retiring.

Frank W. Mattinson, vice president and general manager of Skenandoa Rayon Corp., Utica, N. Y., has resigned his position to become consultant to rayon manufacturers in the Orient, Europe, and South America. He will continue his association with the Utica firm as a rayon consultant.

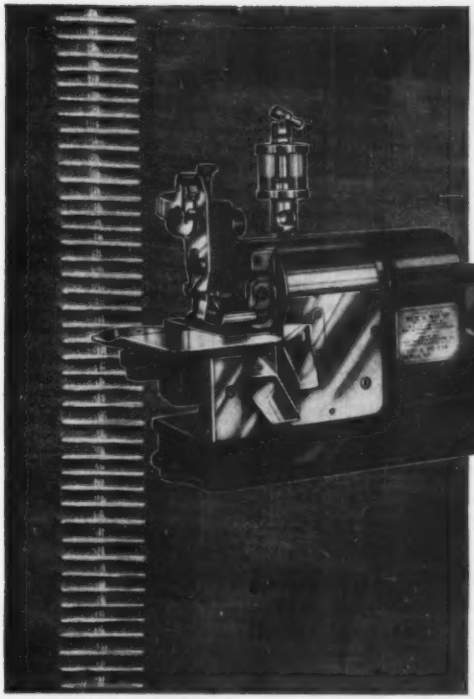
V. F. Maupin has been promoted to superintendent of knitting at Williamson Hosiery Mills, Inc., Athens, Tenn. **Earl Barger** has been named superintendent of finishing, succeeding **Edward Landis**, and **Eugene Sadler** has been named office manager.

John P. Mitzel, for the past two years plant manager for the finishing department of Chadbourn Hosiery Mills, Charlotte, N. C., has resigned.

O. L. Moore, Jr., has become plant superintendent of Bloomsburg Div., Bloomsburg Mills, Inc., Bloomsburg, Pa.

Albert B. Moss has been appointed resident manager of Wortendyke Mfg. Co., plant at Waynesboro, Va. He succeeds **M. A. Simons**, resigned.

William Muir has been named vice president in charge of manufacturing at American Woolen Co., New York, N. Y., with supervision over all of the company mills. **Ernest A. Eckert**, formerly assistant resident manager of Wood Mills, has been appointed divisional manager of worsted mills; and **Lester E. Parkhurst**, former resident manager of Baltic and Mascoma Mills, has been ap-



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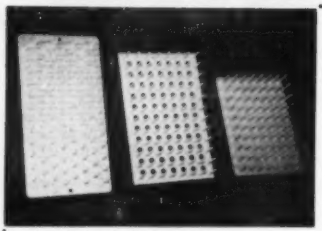

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News About MEN (Continued)

pointed divisional manager of woolen mills. Offices of the three men will be in Lawrence, Mass.

Arthur Mullen has been transferred from the Ayer Mill of Lawrence, Mass., to the Fulton, N. Y., mill of American Woolen Co., as plant manager, succeeding **H. C. Blanchard**, who goes to the Baltic Mills of the same company at Enfield, N. H.

W. S. Nicholson, treasurer of Darlington Mfg. Co., Darlington, S. C., is retiring and will be succeeded by **James M. DeLand**, of Monarch Mills, Union, S. C. Mr. Nicholson has been associated with Deering, Milliken & Co., of which Darlington Mfg. Co. is a part, for the past 22 years.

J. Kenneth Noonan has resigned as administrative assistant in the office of the executive vice president of Textron, Inc., Providence, R. I. He had been with the company for six years and recently was in charge of the disposal of surplus properties and equipment. Mr Noonan is expected to form a new company that he will head.

Roy Playdon has resigned from M. T. Stevens & Sons Co., North Andover, Mass., where he had charge of yarns and raw wool, to become assistant general manager of Aldon Spinning Mills Corp., Talcottville, Conn.

John Pluta has been promoted to overseer of weaving at Angelo Fabrics Co., Inc., Dudley Woolen Mills, Inc., Webster, Mass., succeeding **H. J. Bassett.**

Ralph Presgrave has been made a vice president of York Knitting Mills Ltd., Toronto, Ont. He has been with the company almost 25 years.

Kerwin Purnell has been named superintendent of Stevens Mill, division of J. P. Stevens & Co., Inc., North Andover, Mass., succeeding **Donald Button.**

James Quance has become overseer of dyeing at Pacific Mills, Brookneal, Va., succeeding **Frank Broadhead**, who has become day overseer of dyeing.

Richard Reynolds has resigned as superintendent of the rayon division of Rock Hill Printing & Finishing Co., Rock Hill, S. C.

W. T. Rigby has been appointed plant manager of the Keasby & Mattison Co., mill at Meredith, N. H.

Otis A. Robbins, formerly with Republic Cotton Mills, Great Falls, S. C., has been appointed employment supervisor for Winnsboro Mills, Winnsboro, S. C. He succeeds **John Alexander**, who has been transferred to the Stark Mill of U. S. Rubber Co., Hogansville, Ga.

John O. Rose has been made overseer of slashing and warp-

FRED M. GRAUER (left), former vice president of Florence Thread Co., Inc., Riverside, N. J., has been elected president and general manager. He succeeds JOHN W. THACHER (right), who has retired. F. William Thacher, Jr., former secretary, has been made vice president and treasurer. John W. Thacher, Jr., has been named secretary.

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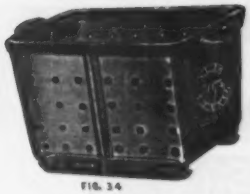

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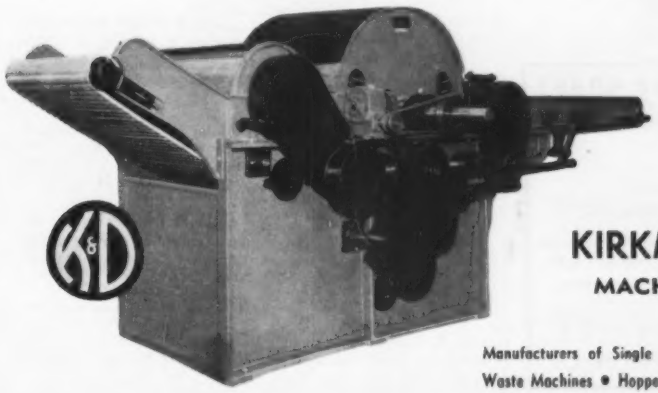

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News About MEN (Continued)

ing at Standard Silk Div. of A. D. Juilliard & Co., Inc., Chadwick, N. Y.

Arthur L. Sampson, designer for Yorkshire Worsted Mills, Lenni Mills, Pa., has been made superintendent and designer of the branch plant in Chester, Pa.

Theodore J. Schwarz has been appointed executive vice president of Sapphire Hosiery Corp., Philadelphia, Pa. **Donald M. Newman,** former Middle-West sales manager, has been elected vice-president and sales manager.

Raymond J. Schuster, for many years at the main plant of Pacific Mills, Lawrence, Mass., has been promoted to resident manager of the Southern plant of the company at Brookneal, Va.

Harold H. Shavlor, formerly with Agawam Woolen Co., Inc., Agawam, Mass., has become overseer of carding, second shift, at Matson Mill, Inc., South Glastonbury, Conn.

Zeb V. Simmons, former general overseer of weaving at Seminole Mills, Statesville, N. C., has been named superintendent of warp preparation, weaving, and cloth room. **H. C. Nixon,** former shift overseer of weaving, has been promoted to general overseer of weaving. They succeed **James O. Elsmore** and **John W. Bush,** who have been promoted to the new United Merchants & Manufacturers' rayon-weaving mill now being completed near Clarksville, Ga.

W. O. Simpson has resigned as overseer of dyeing, second shift, for Barre Wool Combing Co., South Barre, Mass., to accept a similar position with the J. P. Stevens & Co. plant at Rockingham, N. C.

Raymond L. Small has accepted a position as superintendent of L. W. Packard & Co., Inc., Ashland, N. H. He recently resigned his position at Wyandotte Worsted Co., Pittsfield, Mass.

John Spencer has become overseer of weaving for Verney Corp., Brunswick, Me.

H. R. Steffen has been promoted to traffic manager of Spool Cotton Co., New York, N. Y., succeeding **F. W. Wilkinson,** who has retired.

Harry Swaveley has been named plant manager of Arms Textile Mfg. Co., Manchester, N. H., succeeding **R. J. Steffens,** resigned.

W. W. Trowdale has been made a vice president of Kenwood Mills Ltd., Arnprior, Ont., with which he has been connected since 1923. In 1943 he was elected a director and secretary of the company, positions he still holds.

Joseph Walmsley has been named general superintendent of the York Div., Bates Mfg. Co., Saco, Me.

Benjamin Ward has resigned his position with Atlantic Mills, Stottville, N. Y., and with Chatham Mfg. Co., Elkin, N. C.

Joseph M. Wasiuk is now overseer of weaving at W. J. Dickey & Sons, Inc., Oella, Md.

Jesse A. White, general manager of Republic Cotton Mills, Great Falls, S. C., has been named assistant manager of Carter Fabrics Operating Group, a division of J. P. Stevens & Co., Inc., with headquarters in Greensboro, N. C. **Carl A. Johnson,** general superintendent for three Republic Cotton Mills, Great Falls, has been named general manager to succeed Mr. White.

Francis B. Wobecky has been promoted to overseer of dyeing at the Kendall Co., Slatersville Finishing Co., plant at Slatersville, R. I., succeeding **B. A. Heslin.**

George Wood has become overseer of finishing at Guild-Northland Mills, Laconia, N. H., succeeding **Joe Dolan,** resigned.

John F. Yerick has resigned as overseer of dyeing and bleaching for H. & F. Binch Co., Glens Falls, N. Y.

Edward Yost has become superintendent of weaving at the Goodman & Thiese, Inc., plant at Taylor, Pa.

Alfred M. Zimmerman has been named general manager in charge of plant operations at Cold Spring Dyeing & Finishing Co., Inc., Beacon, N. Y.

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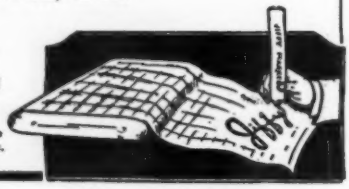

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OBITUARY

Reinhard Born, 53, superintendent of finishing at Bachmann-Uxbridge Worsted Corp., Uxbridge, Mass.; in Northbridge, Mass.

Norman Brock, Sr., 65, foreman at Fulton Bag & Cotton Mills, Atlanta, Ga.

Herbert E. Carroll, 58, superintendent of Lincoln Mills of Ala., Huntsville, Ala.

George W. Clements, 88, a retired partner in A. D. Juilliard & Co., Inc., New York, N. Y.; in Stamford, Conn.

William R. Files, 76, consulting engineer for American Textile Co., Pawtucket, R. I.; in Providence, R. I.

Albert Sloan Ford, 43, president and treasurer of Ford Hosiery Mills, Inc., Hickory, N. C.

William E. Grafe, 65, secretary and general manager of Thurman Mfg. Co., Philadelphia, Pa. He had been associated with the firm for more than 40 years.

John B. F. Graham, retired secretary-treasurer of Powell Knitting Co., Philadelphia, Pa.

Ernest R. Haswell, 59, sales manager for the New England district of H. & B. American Machine Co., Pawtucket, R. I.; in New Bedford, Mass.

Eugene W. Hill, 51, vice president of Dixie Mercerizing Co., Chattanooga, Tenn.; of a heart attack.

Charles Keegan, retired head of dyeing at Killingly Worsted Mills, Danielson, Conn. He was one of the founders of the Eastern Connecticut Mills Assn.

John A. Kester, 48, plant engineer for Cleveland Worsted Mills Co., Ravenna, O.

Joseph B. Knipe, 65, president of Walter E. Knipe & Sons, Inc., Philadelphia, Pa.; at his home.

Albert Leitstein, 45, general manager of the Featured Fabric Finishes Dept. of Warwick Chemical Co., Div. of Sun Chemical Co.

George P. Levey, 74, president of Jewell Brook Woolen Co., Ludlow, Vt.

Tom Loftus, night superintendent for Somersville Mfg. Co., Somersville, Conn.

James E. McCormack, 75, retired foreman at Alexander Smith, Inc., Yonkers, N. Y. He was with the company more than 50 years.

Charles A. McNeil, 72, retired leather chemist. He was head of the leather laboratory of General Dyestuff Corp. for 25 years before his retirement seven years ago.

Joseph E. Merritt, 74, who retired in 1945 as night superintendent of Universal Winding Co., Providence, R. I.

Edward Muchnick, 49, owner of Empire Hosiery Mills, Mantua, N. J.; in Wayne, Pa.

Thomas H. Parkinson, 69, superintendent of spinning at Warwick Mills, West Warwick, R. I., for seven years before his retirement in 1944

Claude L. Seidel, 77, president of Maiden Creek Hosiery Co., Temple, Pa.; in Reading, Pa.

Glenn Sensiba, general manager for the Midwest of the Sigmund Ullman Co.

Joseph Barnett Sherrill, 35, vice president of Gem Yarn Mills, Cornelius, N. C.

Homer T. Sibley, 64, director of Brampton Woolen Co., Newport, N. Y.

John H. Swanson, 45, production superintendent of Dundee Mills No. 1, Griffin, Ga.; at his home.

Frank J. Vincent, 89, who established the Vincent Mfg. Co., in Little Falls, N. Y.

Charles F. Weber, 69, who retired in January as a vice president and treasurer of Allied Chemical & Dye Corp.

Judge J. Ambler Williams, secretary of James Lees & Sons Co., Bridgeport, Pa.; at his home in Norristown, Pa.

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OPENING FOR laboratory man who can match shades, test dyestuffs, etc., one who has had some experience preferred — excellent opportunity. P-2183, Textile World.

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WANTED—ASSISTANT Dyer for yarn dyehouse handling directs, developed and vat colors by the package method—one who can match colors and handle help. Excellent future for the right man. P-2179, Textile World.

WANTED: EXPERIENCED Raschel Machine Fixer. Large company. Right salary to right man. Send resume of experience and salary requirements. P-2292, Textile World.

POSITIONS WANTED

COLLEGE GRADUATE, age 26, two years cotton mill experience in carding & cotton classing, desires change. PW-2299, Textile World, 330 W. 42 St. NYC 18.

HIGHLY EXPERIENCED Rayon, Silk, Nylon throwster familiar with U. S. textile—old and new model Atwood throwing machinery—Reliable Capable assuming full responsibility—will revitalize present lagging throwing plant or establish throwing department any size for weaving or hosiery concern South or North. Reliable references. Married. PW-2316, Textile World.

PLANT MANAGER, B.S., licensed, 25 years broad experience, including 16 years plant engineering in large cotton textile plant. Familiar with requirements of plain mill, also finishing, steam power generation, materials handling, etc. Want opportunity to assume responsibility where experience and executive ability are essential. PW-2295, Textile World.

PLANT SUPERINTENDENT have 30 years experience on Rayon, Nylon, Silk Acetate, on Draper Loom—C and K Loom. Will be open for position first of the year. PW-1868, Textile World.

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PW-2275, Textile World
330 W. 42 St., New York 18, N. Y.

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P-2305, Textile World
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Salesman Wanted

A young progressive organization manufacturing chemicals for the synthetic rayon and silk industries is seeking man with thorough knowledge of weaving and throwing to solicit business in Pennsylvania, New Jersey and New York.

SW-2139, Textile World
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WANTED

Napping Supervisor

Must be experienced on napping, shearing, sanding, and sueding of synthetic blends. Location in the South with large, well established textile firm. Give full details of work experience.

P-2188, Textile World
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36—Frames Whitin Tape Drive Spinning, 3-1/8" Gauge, 240 Spindles each, Conventional Draft, 2" Rings.
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1,000—12" x 36" Fiber Silver Cans.
6—40" Whitin Flat Top Cards.
4—10 x 5 Long Draft Slubbers.
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DYEING AND FINISHING PLANT

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(Additional Wanted Advertising on page 324)

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SALESMEN and sales managers; mechanical engineers; tricot mechanics; time-study men; loom fixers; industrial engineers; mechanical draftsmen and designers; electrical engineer; chemists and chemical engineers; second hand woolen dyeing and laboratory assistants; Wildman girdle knitting machine fixer; narrow fabric loom fixer; print works colorists; cotton comber; garnett foreman; fixer Komet and Links and Links machines; second hand wet and dry finishing woolen fabrics 2nd shift.

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Excellent condition, all now in operation. Spring needle machines, all 28 cut, stop motions, over-head drives. Assorted 12" through 17" and 20". 20"-12 feed; 17"-10 feed; 15" & 16"-8 & 10 feed; 12", 13", 14"-8 feed.

FS-2029, Textile World
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21 West 15th St., N. Y. C.
Yarn Representation wanted in N. Y. area

DYESTUFFS

Will buy your surplus and obsolete dyes and chemicals for cash.

NEW ENGLAND PRODUCTS CO.
91 Oliver St. Boston, Mass.
Established 1919

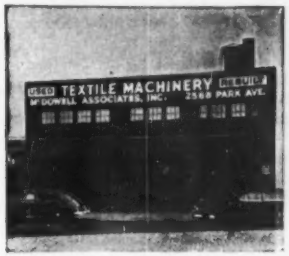
BOUGHT — SOLD
Glycols—Cellosolves—Ethanolamines
Phthalic—Maleic—Penta
Titaniums—Bichromates—Dyes—Colors
Soda Ash—Caustic Soda, etc.
CHEMICAL SERVICE CORP.
80-10 Beaver St. New York 5, N. Y.

FOR SALE OR RENT

Complete Package Dyeing Plant

Stainless Steel, including dryers and extractors. Also winding equipment.

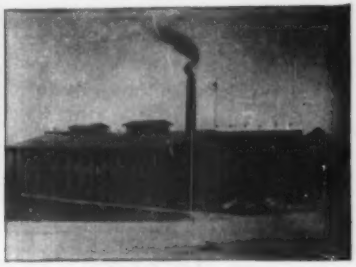
FS-2215, Textile World
330 W. 42 St., New York 18, N. Y.



Executive Offices and New York Warehouse

McDOWELL ASSOCIATES INC.

FOR SALE



Hudson, New York Warehouse

PARTIAL LIST---IMMEDIATE DELIVERY

LIQUIDATING RARITAN MILLS RARITAN, N.J.

8 Kitson RAG PICKERS
1 Harwood auto. FEED BOX
2 Atlas auto. FEED BOXES
1 D&F FEARNAUGHT PICKER 48", 1944 model with oiler
1 D&F MIXING PICKER 48" with oiler
4 Boston STOCK BLOWERS
1 Hoffman WASTE COLLECTING SYSTEM, installed 1948
4 DYE KETTLES, percolator type, Raw Stock
1 Wood DYE KETTLE, sample
2 Wood DYEKETTLES, 4 string
1 Wood DYE KETTLE, 6 string
4 Wood DYE KETTLES, 8 string
1 Sargent RAW STOCK DRYER with hopper and Hunter Pit Feed Squeeze Extractor, 1944 model
1 Gessner SCUTCHER 72", 1944 model
18 Sets D&F 4 cyl. CARDS, 48"x48", Scotch Intermediate Broad Band Feeds, 1944 model and 8 CARDS with Whitin double rubb K4DB TAPE CONDENSERS 96 ends installed 1948, balance of CARDS Barker Rubs
18 Sturtevant WASTE END CONVEYORS with Blowers
2 Roy FLOOR GRINDERS
1 D&F FLOOR GRINDER
2 Roy TRAVERSE GRINDERS for cylinders
2 Roy ROLL GRINDERS for cylinders
1 Howard CARD TENSION REGULATOR
44 Ionotron STATIC ELIMINATORS
2 Sturtevant STOCK BLOWERS #7
5 J&B MULES, 1946 model, 360 spdls. ea. 2½" ga.
9 J&B GP MULES, 1943/45 model, 312-336 spdls. ea. 2½" ga.
3 Furbush Pinless REELS, 92"
1 D&F Pin REEL 92"
4 Warp Machine Co. DRESSING FRAMES
8 Warp Compressing JACK SPOOLERS 40 ends
1 J&B SPOOLING CREEL 40 ends
1 Warp Machine Co. MAGAZINE CREEL 40 ends
40 C&K LOOMS 92" auto. 4x1, 25 har.
19 C&K LOOMS, 82" 4x4, 25 har.
1 Schofield BOBBIN STRIPPING MACHINE
1 R&L 4 truck YARN STEAMER, 1946 mod.
3 Universal #90 WINDERS
1 Windle DOUBLER 66"
1 Toledo SCALE style #9612B
1 Birch POWER PERCH
1 AIR CLOTH GUIDER, mod. #45
1 DOUBLING & TACKING MACHINE
1 Voelker CLOTH PRESS 66"
1 Gessner CLOTH PRESS 66"
3 P&W single SHEARS
1 Gessner SEMI DECATUR 72", 1944 mod.
2 Gessner NAPPERS DA 80"
2 Gessner NAPPERS SA 90"
1 P&W SHEAR double blade 66"
1 Kenyon CARBONIZING DRYER rebuilt with acid tank, 2 sets of rubber squeeze rolls, Tenter Dryer, 6 tier, 84",with Baker, controls, etc.
1 Kenyon WASHER 6 string
1 Kenyon WASHER 8 string
1 R. Hunt WASHER 4 string
1 R. Hunt WASHER 8 string
1 R. Hunt WASHER 10 string
5 Kenyon FULLING MILLS single
1 R&L FULLING MILL express type
1 R. Hunt FULLING MILL, double comp.
1 R&L CLOTH SOAPER
1 New R&L Fleet Line Continuous CLOTH WASHER, pneumatic Squeeze Sets
Motors, shafting, sewing machines and supplies for operation of above equipment

REBUILT FROM WAREHOUSE STOCK

2 BATCHERS single drum 66".79"
1 BEAMING HEAD for Warper
1 Up & Down Wet BRUSH 66"
1 Vertical BRUSH 57"
1 Steam BRUSH 2 cyl. 63"
1 CALENDER knit goods 36"
1 CALENDER friction, 3 roll 45"
2 CHINCHILLA MACHINES 80"
2 CONDENSERS, return air upright type, cyls. 72"x37" dia.
4 Ceiling CONDENSERS, cyls. 36"x18" dia. self contained fan type
1 Tape CONDENSER 48", 112 ends
2 Tape CONDENSERS 60", 96 ends
4 Rub CONDENSERS 48"-60"
1 Reaves DRIVE #2—4:1 ratio
1 Semi DECATUR 70"x36" dia. cyl.
1 DEWING MACHINE 60" cloth
1 Combination DOUBLING & OPEN WIDTH WINDER 66½"
3 DOUBLING & WINDING MACHINES, 62" - 66" - 80"
1 EXTRACTOR 55 Basket 48"
1 EXTRACTOR monel Basket 50"
2 Hopper FEEDERS 44" - 60"
1 FOLDER 78" adjustable ½ yd. 42"
1 Napper GRINDER 90"
2 GARNETTS 3 cyl. units, 30"x60"
2 INSPECTING MACHINES 64"
2 Starch & Mixing KETTLES, approx. 80 gal. ea.
72 C&K W1 auto. LOOMS 82"
10 C&K W3 auto. LOOMS 92", 1948/49 mod.
2 C&K W3 auto. LOOMS 92", 1944 mod.
18 C&K auto. LOOMS 92"
2 Double Shuttle Plush LOOMS 66"
1 MANGLE 2 roll 50"
1 MEASURING MACHINE 66"
1 MIXER 120 qt.
1 NAPPER, knit goods, 16 roll, 66"
1 NAPPER, 14 roll SA 72"
1 NAPPER, 14 roll SA 86"
1 NAPPER, 24 roll DA 86"
1 NUB BOX for 48" Card
2 Power PERCHES 93½
2 Burr PICKERS 24"-36"
1 Mixing PICKER 6 bar 40"
1 Fearnaught Mixing PICKER 48"x48" feeder
1 Iron Fearnaught Mixing PICKER 48"x50"
1 Rotary Steam PRESS 86"
1 QUETCH, 2 roll 50"
1 QUETCH, 3 roll 50"
1 QUETCH, 2 roll 65"
1 Portable Electric Rotary SEWING MACHINE, Merrow 60-D3B head
10 Rotary Foot Power SEWING MACHINES
4 Portable Railway SEWING MACHINES 56" - 60"
1 SHEAR single 40"
1 SHEAR double 40"
1 SHEAR, auto. 4 bl. 80"
2 SHEARS, single 66½"
1 SHEAR Hi Speed BB 66"
2 SHEARS, double 66½"
2 SHEARS, model A double 66½"
1 SHEARING, STEAMING & BRUSHING RANGE 66½"
4 SPINNING FRAMES, 180 spdls. ea. 4" ga.
1 TACKING MACHINE 92"
2 WARP REELS pin type, 82"
2 Cloth WINDERS 50" - 60"
2 Universal #90 Bobbin WINDERS
1 WINDER paper cones, 16 spdl.
1 WINDER COMBINATION tube & Paper cones, 60 spdls.
1 Bottis WINDER 40 spdls.

COTTON

1 BALE BREAKER 9' apron
1 LATTICE CLEANER #12
2 Vertical OPENERS
1 Horizontal CLEANER #54
1 Floor CONDENSER
2 BREAKER LAPPERS 45"
2 FINISHER LAPPERS 45"
25 COTTON CARDS 45", 27" doffer, 12" coilers
44 DELIVERIES, drawing
3 SLUBBERS, 72 spdls. ea. 5½"x11"
8 INTERMEDIATES, 124 spdls. ea. 4½"x9"
2 INTERMEDIATES, 160 spdls. ea. 4"x8"
1 FLAT CARD GRINDER 47"
1 LAP SCALE, 100 lb.
9 SPEEDERS, 176 spdls. ea. 3½"x7½"
2 SPEEDERS, 184 spdls. ea. 3½"x7½"
8 SPINNING FRAMES, 204 spdls. ea. 3" ga.
9 SPINNING FRAMES, 216 spdls. ea. 3" ga.
17 SPINNING FRAMES, 240 spdls. ea. 3" ga.
1 SPOOLER, 80 spdls. 5" ga.
1 TWISTER, wet, 200 spdls., 3½" ga.
1 BOBBIN STRIPPER for roving bobbins
2 Abbott model #85 auto. CONE WINDERS, 1949 model, like new
Motors, bobbins and supplies for above cotton equipment.

McDOWELL ASSOCIATES, Inc.

2568 Park Avenue — Bronx 51, New York

Tel. - MElrose 5-6741

FOR SALE

4—Saco-Lowell 40" single process pickers, 2 beaters.
1—Kitson 40" single process picker, 2 beaters.
56—H&B 40" cards, 26" doffers, 12" coilers.
9—Dobson & Barlow cards, 6—40" and 3—41".
3—Whitin waste cards, roller top, 1921 model, Bramwell feed, breaker card, scotch feed, finisher card, tape condenser.
5—Woonsocket 11x5½ slubbers, 68 spindles each, regular draft.
8—H&B 10x5 slubbers, 5 roll H&B long draft, 6 frames 108 spindles each, 2 frames 102 spindles each.
14—Saco-Lowell 9x4½ intermediates, regular draft, 12 frames 104 spindles each, 2 frames 96 spindles each.
4—H&B 8x4 slubbers, 5 roll H&B long draft, 160 spindles each.
4—Whitin spinning frames, 3½" gauge, 2½" ring, 228 spindles each, Roth long draft, band drive.
46—Fales & Jenkins spining frames, 3¼" gauge, 2" ring, 252 spindles each, Roth long draft, tape drive.
2—Abbott cone winders, 160 spindles each, wooden cones, one Model 65 and one Model 64.
4—Foster winders Model 101, 100 spindles each, paper cones.
1—Entwistle high speed warper, 432 end magazine creel.
21—Whitin twisters, 4" gauge, 3¼" ring, 180 spindles each, tape drive.
1—Saco-Lowell cotton slasher 5' and 7' drums.
100—Draper Modified D looms 60" cloth, 2 harness belt driven.
18—Draper Modified D looms 40" cloth, 2 harness, belt driven.
20—Draper Model E looms, 48" cloth, 2 harness, motor driven.
1—Hermas 40" shearing machine, 4 motor driven blades.
1—Granger tenter frame, 100"x30', stainless steel clips.

COMER MACHINERY COMPANY
308 Ivy Street, N.E. Atlanta, Georgia
CY press 2505 Cable—Comach P.O. Box 1244

Triangle Offers

1—84" Beamer, mtr. (new)
27—Milton Beams (new)
1—Time Clock (Internat'l.)
1—128 Spdl. Cone Creel
1—Hermas 76" Exam. Mach., Mtr. (new)
1—Progressive 84" Exam. Mach., Mtr. (new)
12—Draper Mod. "E" 84" R.S. Looms with 1304 Hook Double Lift Halton Jacquards
24—Draper Mod. "D" 80 ½" R.S. Looms, 12 with 1304 Hook Double Lift Jacquards & 12 with 2608 Hook double life Jacquards.

Note: Looms now set up with harnesses, heddles, lingoes, kobar boards, gantries, etc.
1—Morrow Sewing Machine, stand & Mtr., Style 60W Serial #3524.
1—Terrell Auto. Quill Stripper, Serial L-341, Air Compressor.
1—Sipp-Eastwood DY Horiz. Warper, Sipp-Eastwood 1024 End High Speed Creel, overhead beam trolley rail, elec. hoist for beam hoist.
1—Hill 32" Edge Warping Mach., mtr., approx. 300 edge spools, 6 ⅛" heads, 4" I. D.
8—#90 Universal Quill Winders, mtrs.

TRIANGLE
PROCESSING MACHINERY CO., Inc.
Specializing in Export & Domestic Production Machinery
305 CLIFTON AVE. Telephone: PRescott 9-8850 CLIFTON, N.J.

AIR COMPRESSORS
VACUUM PUMPS
Rebuilt by American Since 1902

Your Choice	Your Model
American	*Stationary*
Bury	Horizontal
Chicago Pneu	Vertical
Curtis	Electric
Davey	Steam
Gardner Denver	*Portable*
Ingersoll Rand	Gasoline
Le Roi	Diesel
Pennsylvania	Pneu Tires
Schramm	Skids
Sullivan	Steel Wheels
Worthington	

For Sale For Rent

FOR RENT—ANY ONE OF OVER 300 COMPRESSORS IN STOCK

AIR RECEIVERS - AFTERCOOLERS
AMERICAN AIR COMPRESSOR CORP.
48th & Dell Ave. No. Bergen, N. J.

TEXTILE AUXILIARIES
SPECIALS FOR THIS MONTH
Copper Cans, all widths and diameters, from single cans to sets of 50, with vertical or horizontal stands.
1—National late type Loop Dryer, 84" wide, with revolving sticks, 4 side fans, with fab gasteram 4 nitro.
1—76" Scutcher with vacuum slot and ceiling folder.
1—60" and 1—42" Embossing Calender.
1—40 Hydraulic Calender, 10 tons.
1—Day Re-Ball Screen #71, practically new.
Also, Motors of all types—Dye Pads, spare Can Gears and spare Pad and Calender Rolls.
15-17 ORMSBEE AVENUE TEL: DEXTER {1-9650 1-8837 WAREHOUSE: 146 WEST RIVER ST.
PROVIDENCE, R. I.

FOR SALE
40 M. 8¾" A.L. Wool Bobbins
650 Drop Wires Draper—Oscillating
15 Pr. Wood Heads 28" Beam.
900 M Flat Steel Heddles 10" with frames
25 M Flat Steel Heddles 14" loose
3 M 3" Vericle Spinning Rings
564 Spindles Ring Rover change-over
500 Heddle frame 90"-90" for 14" hed.
Lot of Heavy Drawing Top Rolls—worsted.
J. J. McCaffrey & Son Inc.
P.O.BOX 485, Established 1920 Tel. 3-1344 PAWTUCKET, R.I.

MILLER MACHINERY CO.
66 RAILROAD AVE. PATERSON, N. J.
Tel. Sh 2-5467-8

Used Textile Machinery and Supplies

BOUGHT AND SOLD
Warpers • Winders • Quillers Looms

FOR SALE

2—Cone Dusters 1-6' & 1-10' Wool Openers
1—Sargent 40" Woolwasher 5 Bowls & Dryer
1—SACM French Type Wstd. Card 54x50, Feed
1—Complete Noble Comb Unit—Fine Wools: 16 Combs with Open & Intersecting Gill Boxes Spare circles and parts
9—C&K 60" Noble Combs. Spare Coarse Circles
2—James Smith & Son Comb. Ballers
1—3 Head & 2-6 Head Intersecting Gill Boxes
3—48" Whitin Mod. "C" Tape Condensers
1—D&F Complete Unit Pin Type Dressing Frame 120"
2—J&B 312 Sp. Mules Giant Package 3" ga
1—J&B 330 sp. Mule 2½" ga
3—Bagging Machines

JAMES SPEED & COMPANY
522 Andover St. Lawrence, Mass.

A COMPLETE WOOLEN MILL

With six sets of cards, three spinning frames, three mules, twenty-four Automatic looms, dyeing and finishing motors and all other machines needed for a complete plant.

We can furnish repair parts and repair all types and makes of Platts, Furbush, and Bridesburg woolen mules. Cylinders, workers, strippers and parts for woolen and Worsted cards.

DOYLE & MILLER
Main & Pensdale Sts. Phila. 27, Pa.

FOR SALE

12 —Whitin Nasmith Combers, 1923 & 27 Models, Individual Motors and Drives.
2 —Whitin Silver Lap Machines, Ball-bearing Heads, Individual Motors and Drives.
2 —Whitin Ribbon Lap Machines, Ball-bearing Heads and Individual Motor Drives.
6 —9 x 4-½ Whitin Interdraft Slubbers, Chain Compound, Excellent Condition. 1—120 Spindles, 5—126 Spindles.
4 —Whitin Spinning Frames, 30" Frames, 240 Spindles each, 3" Gauge, Band Drive, Separators.
12 M—New Draper Spinning Rings, 1-13/16" #1 Flange.
500 M—3" Draper Quills, for Light Whitin & Medium Spindles, some Brass Tipped and some Plain Tipped, all are Brass Bushed.
1 —9 x 4-½ Super Draft Slubber, 120 Spindles, Chain Compound.

ALL-FIBER TEXTILE MACHINERY CO.
P. O. Box 184 Belmont, N. C.

FOR SALE
100—CHROMIUM PLATED DRYING CANS

48" dia. 48½" face, complete with gears and bearings. These dryers are in perfect condition and can be inspected. They are available in lots of 5 or more.

OSBORNE PAPER MILL EQUIPMENT CORP.
FULTON, N. Y. Tel. 54

. . WE OWN AND OFFER FOR SALE . .

45-AUTOMATIC, S-4
4x1 SHUTTLE CHANGE
RECONDITIONED

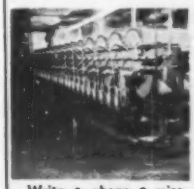
roller bearing, shock absorbers, 20 hook double index dobbies, removable cloth rollers, temples, pick clocks, ½ HP, 220 volt, 60 cycle, 3 phase, 1750 RPM Motors, electric warp stop motions, beams.

Can be inspected at our plant.

SPECIALISTS IN REBUILDING & RECONDITIONING LOOMS

COMPLETE PLANTS AND REAL ESTATE BOUGHT, LIQUIDATED AND APPRAISED

Paterson Textile Machinery Exchange
INC.
formerly the Paterson Silk Machinery Exchange, Inc.
22 SPRUCE ST. SHerwood 2-1363-4-5-6 PATERSON 2, N. J.



FOR SALE
58—23" dia. x 105" face copper cans bucket type frames and bearings.
30—23" dia. x 88" tinned iron dry cans gear driven bucket type frames and bearings.
8—23" dia. x 50" face copper dry cans bucket or siphon type ball bearings or friction bearings.
9—23" dia. x 40" face copper dry cans bucket or siphon type gear or chain driven.
2—5" x 56" face copper slashers bucket type.
Dry can machines built to your specifications.

Write • phone • wire
EASTERN TEXTILE CO.
296 Lincoln Ave. *New and Used Finishing Machinery Specializing in Dry Can Machinery*
Tel. 33228
Fall River, Mass.

BUY FROM HEADQUARTERS

A BACKGROUND OF 35 YEARS

1—Proctor & Schwartz Fibre Feeder and Shredder.
1—Whitin Schweitzer NEW 1951 automatic Filling Winder.
1—Saco-Lowell 5-Section Waste Garnett Machine.
2—James Hunter 2-cyl. Garnetts, Bramwell Feeds. New Clothing.
1—Wiesner Rapp All Stainless Steel Kier.
1—Cameron #6 Slitter, 62".
1—Simpson 48" Batcher.
1—2-roll Hydraulic Embossing Calendar, 65".
Stack 25 Copper Cans, 106", syphons, Folder.
1—James Hunter Cloth Dryer, 72".
1—Butterworth 60' Clip Frame, Stainless Steel Clips with housing, vari-drive motor.
2—Smith-Drum 50# Paddle Dyers, 1—Stainless Steel, Brand New.
2—Hussong S.S. Skein Dyers.
1—Woonsocket 86", 24-roll D.A. Ball Bearing Napper.
1—Economy 60" Upstroke Baler, double load chambers, like new.
1—Sipp Eastwood Silk Creel.

WE BUY FROM A SINGLE ITEM TO A COMPLETE PLANT

CONSOLIDATED PRODUCTS CO. INC.
13-16 PARK ROW N.Y. 38 N.Y. BArclay 7-0600

FOR SALE

Universal #50, #90 Winders rebuilt to your specifications.
1—Emerson Yarn Conditioning Oven
1—Landfear Spool Printer
2—Rebuilt, Lindsay-Hyde Reels
1—Atwood 4 Section 7K Reels
2—Atwood 4 Section 10K-W Reels
5—Ruf Balling Machines
4—Chelmsford Balling Machines

GAINES TEXTILE MACHINERY CO. INC.
141-45 West 17th Street New York 11, N. Y.

REBUILT MACHINERY FOR IMMEDIATE DELIVERY

1—72" Parks & Woolson Decatiser, Pump & Motor.
1—Butterworth Clip Tenter 40' x 72", Stainless Clips, Reeves & Motor.
1—Hinnekens, 60" Variable Speed Examining & Tubing Machine.
1—Elliott & Hall 54" and 60" Flat Folders.
2—W.J. Tenter Frames, 30' x 54"
1—W.J. Tenter Frames, 30' x 96"
1—3 roll silk or rayon Calender, M. D.
1—42" Self Balancing Extractor, M. D.
2—150 gal. Jacketed Kettles with agitators.
1—Set of 21-72" x 23" Dry Cans Horizontally.
1—72" Hydraulic Padder, M. D.
1—Set of 9—30" x 80" Heavy Steel Dry Cans.
1—Set of 7 copper cans, horizontal, Reeves & motor.
1—50" V. V. Button Breaker.
1—64" Van Vlaanderen motor driven Tuber.
1—54" King & Gerber embossing calenden M. D.
2—60" motor driven Beamers.
4—Hermas measuring & inspecting machines, tube to tube.
1—60" Measuring, Inspecting & Tubing Machine, tube to tube, new, variable speed, forward, neutral & reverse.
30-60 gallon copper steam jacketed Kettles.
1—Hinneken's Roll-off Machine.
1—Sterling 7½ H. P. Vari-drive.
1—Reeves 7½ H. P. Vari-drive.
About 5,000 S. S. high speeed V. V. Clips.
Agitators of various sizes.
Motors of various sizes.
New & Used Electric Hoists.

One 66"—5 Drum Johnson Slasher, Reeves Drive & Motor. In excellent condition
2-3 ft. 2-8' 1-10' 1-14' Stainless Steel Lined Dye Boxes
New Copper Rollers 16" x 60" wide, W Bore

SHerwood 2-7666 SHerwood 2-7667
DOMESTIC Moe Blank EXPORT
TEXTILE MACHINERY
523-525 E. 18th ST. PATERSON 4, N. J.

1—Barber-Colman Model K Portable Knot-Tyer
1—D&F 7' Cone Duster
1—Lombard 60" x 48" Woolen Card
1—Armstrong Cork Cot Buffing Machine
1—Dodge Rag Picker
78—Draper Model E 48" Looms
16—C&K 48" Automatic Looms 2x1 box
50M Giant Package Mule Bobbins
12—Universal #90 Winders

WHITEHEAD SUPPLY & ENGINEERING CO.
In textiles—anything from lap-rod to complete plant
533 Main St. Melrose, Mass.
Tel. MElrose 4-4980

KASTRINSKY—3—ROLL STEAM CALLENDER MACHINE,
24" wide, cooling system, top & bottom steam boxes, condensation chamber; vari-speed motor base; also 14" Gas Boiler Outfit, complete with water feeder and gas regulator. Practically new outfit at a bargain price.
LOUIS GROSSER
1001 Church Ave., Bklyn. 18, N. Y. Ingersoll 2-1133

Mill Modernization

(Continued from page 111)

When one considers the inter-industry breakdown, however, as given in the larger series of graphs on page 000, one has to be a little careful. No longer are the branches of the industry so sharply delineated as they used to be. Cotton mills now spin, weave, and finish rayons; woolen and worsted mills have in some cases become partly synthetics mills; some rayon weaving mills have installed high-speed knitting equipment; some dyeing and finishing plants are adjuncts of other types of mills; some people do and some people do not consider primary synthetic-yarn manufacturers as being in the same industrial category as rayon mills. So the breakdown picture is pretty well blurred in this post-war day and age.

As in previous years then, expenditures and commitment notations have been allocated, in other than the obvious cases, to the category by which the mill in question is generally known.

Further Breakdowns

It is interesting to note again this year, as in 1950, that cotton and rayon-type mills accounted for about two-thirds of the expenditures and commitments. A little higher percentage of money appeared to go into rayon-type mills this year than last, and cotton mills lost ground proportionately. Woolen and worsted mills

MACHINERY LIQUIDATING COMPANY

A FEW ◀MLC▶ OUTSTANDING VALUES

LOOMS

200—48", 52", 54", 56" R.S. C&K Plain Silk Looms, 20 h., motor driven
60—51½" R.S. Draper Model E Rayon Looms, 16 harness
90—52" R.S. Draper Mod. D Dobby Looms
20—52" R.S. C&K 2x1 Plain Looms, Gem heads, motor driven
30—54" R.S. C&K 4x1 Plain Looms, dobbies, motor driven
10—56" C&K 2x1 S-3 Auto. Shuttle Change Looms, 25 harness
24—72" R.S. Draper Mod. D 2x1 Looms, with jacquards
6—72", 84" R.S. C&K 4x4 Box Looms with jacquards
30—72", 82" C&K 4x4 Box Looms, motor driven
60—79½", 82" Draper Mod. D Looms, 20 harness, motor driven
18—82" C&K Veribest Looms, 25 h., motor driven
100—82", 92" C&K 4x1 Auto., 25 harness Looms, motor driven
8—100" C&K 2x1 Auto. Looms, 25 harness
8—Paul Muller Label Looms, 1938-44, with C&K Jacquards
2—63" Simpson type Winders
1—50" Silk Calender
1—67½" Yale Semi-Decator, 36" dia. cylinder
2—60" & 68" P&W Doubling Mtg. & Winding Mchs.
1—82" P&S Rev. Stick Loop Dryer

1—60 arm Buhlman Skein Dyeing Machine
1—50" Continuous Vat Dyeing Machine, complete
1—60" Hunts stainless steel lined Dyeing Machine
1—6 string Stainless Steel lined Dye Kettle
2—92" Hunter 1941, 8-cylinder double doffer Garnetts, complete, with runs no-end aprons, compression rolls, batt folders, slitters, P&S cone willow
1—60" James Smith 3 cyl. Garnett
1—30" Sample Piece Dye Kettle S. S. lined
2—Kiers: 8x14' and 9x13'; pumps & motors
2—360 sq. J&B 3" gauge Mules, Brand New
1—78" Barchers 14R Dbl. Acting Knapper
5—45"—80" 2 and 3 roll Padders
1—66" V. VI. Palmer complete with Quetch
4—52"—92" Gessner Cloth Presses
1—40" C & M Fearnaught Picker
1—40" James Smith Mixing Picker
1—60" R.B.&F. 4-color Print Machine, will accommodate print rolls 30" circumference
1—72" Birch Bros. 4-burner Singer (like new)
1—60" James Smith 2 cyl. Shoddy Card
1—70"x148" Textile Pin Tenter, carbomatic gas burners.
1—104 sp. Draper 4½" ring, Twister, motor driven

WANTED—GOOD SURPLUS TEXTILE MACHINERY OF ALL TYPES

MACHINERY LIQUIDATING COMPANY

A Dealer of Recognized Reliability—Domestic & Export

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NEW SIEVE PLATE EXTRACTORS

For Immediate Delivery

BRAND NEW—TOP QUALITY

This copper equipment just released as excess by a major chemical plant. This unusual offer, at substantial savings can be purchased without requiring CMP or DO certifications. Manufactured to specifications by E. B. Badger & Sons Co.

DATA:

- 63 in. diameter x 66 ft.—9 ¼ in.
- Cross-sectional Area 3630 sq. in.
- 100 Trays—6 in. spacing, Sieve-Type Plates.
- 20,450 Holes—7/64 in. dia. on 11/32 in. centers.
- 5.3% Hole Area or 193 sq. in.
- 4 ft.-8 ft. Down Pipe Size.
- 10 PSI-Design Pressure.

NEW HEAT EXCHANGE EQUIPMENT

Item	Quan.	Material		Outside Surf. Sq. Ft.
		Tubes	Shell	
Feed Vaporiser	2	316 SS	Carb. Steel	1137
Cooler	2	Copper	70/30 Cu-Ni	1483
Bottoms Cooler	4	Copper	Copper	1885

All above equipment new, can be shipped at once. For further information on these and other chemical items:

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NEW DRAPER "XD"
46", 20-HARNESS DOBBY, 26" STEEL BEAMS, ELECTRIC STOP MOTION—IMMEDIATE DELIVERY

S-3 LOOMS
C & K 56" REED SPACE 2 x 1 AUTOMATIC SHUTTLE CHANGE

RAYON SLASHER
66" x 23", 7-DRUM, STAINLESS STEEL

SIPP 84" HI-SPEED WARPER, ALL METAL WITH 1040-END MAGAZINE CONE CREEL, 1948

NON-AUTO LOOMS, 52"-56" 2 x 1, 4 x 1, DOBBY

S-4, 4 x 1 SHUTTLE CHANGE, 54" REED SPACE

66" AND 52" RAYON CHROME SLASHERS, COTTON SYSTEM

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2—48" Pit Feeds
1—P.&S. 60" Card Feed (Mod. 535—Practically New)
1—Sargent 42" Picker Feed
2—Sargent 82" Raw Stock Dryers
1—Hunter 7 section Raw Stock Dryer
1—D. & F. 7' all iron Cone Duster
1—Schofield 48" automatic Duster (box)
1—Woonsocket 36" x 36" ceiling condenser & blower
1—S.F. 60" Garnett Shredder
1—"Parkhurst" 48" Burr Picker with Feed
1—Sargent 36" Duplex Burr Picker
3—Dodge, Schofield 18" x 30" Shoddy Pickers
1—D. & F. 48" Fearnaught Mixing Picker
2—Tolhurst 48" S S Extractors (New)
2—Card Floor Grinders 60"

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4—D. & F. or Altemus Warpers—rebuilt to order—82"—120". Fin or Pinless
1—Entwistle Hi Speed 54" Beamer & Creel
1—Globe Ball Warper & Creels
6—Draper 54" Mod. G Warpers
24—C. & K. W2, 82" 4x1 Looms
4—C. & K. 82" 4x1 automatic Looms
4—C. & K. 82" 4x1 automatic Looms
12—C. & K. 82" (4x4) Box Looms
2—L & G Chenile Cutters
1—Terrell Mod. K Bobbin Stripper

WINDING

UNIVERSAL #50 & #90 WINDERS REBUILT TO ORDER

1—Universal 60 G.F., 96 sp. Cone Winder
1—Foster, Mod. 101, 1.0 sp. Cone Winder
1—Foster, Mod. 12, Skein to cone Winder, 60 sp.
2—J. & B. Jackwinders, 80 sp. & 120 sp.
10—Lindsay Hyde Adjustable Skein Reels
1—Whitin Quiller 2½" Gauge (long chain)
1—Lazenby 15 sp. Cop Winder

FINISHING

1—Perkins Cloth Filer, 72" traverse
2—Sets Squeze Rolls 72"
2—Birch Bros. Doub. & Tack. Mach. (92")
1—Woonsocket 84" D. A. Napper, 36 rolls
1—P. & W. 66" 4 cyl. Brush & Sander
2—Tease Gig's, double cylinder (60")
2—Rope Soaping Machines (lead lined)
1—Yorkshire Crab 72"—3 bowl
1—S/S Lined 60" Wetting-out Tank with squeeze rolls (Pneumatic Pressure)
2—P. & W. 66" Mod. A Double Shears
2—Voelker 65½" D. B. Presses
2—P. & W. 88" Semi-Decaters
1—Set Dry Cans (4) 27" Copper
24—Vertical 100" Dry Cans, Copper, Tinned Steel
1—P. & W. Lancashire 93" Cloth Boarding Machine
1—Windle 66" Cloth Doub. & Meas. Mach.
2—P. & W. 66" Cloth Doub. & Meas. Mach.

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Reputable Dealers for over a quarter of a century

WE OWN AND OFFER FOR SALE

3 Atwood D.D. Twisters—184 Spindles Each. Motorized.
20 Atwood Redraws — Gate Tensions — Accommodates 5" Head.
1 Terrell Bobbin Cleaner.
1 Whitin D.D. Uptwister—Wideless Pkg. 1941.
30M Spinner Spools—4½" T. x 3¾" H.
80M 7" Paper Cops with Metal Feelers.
22M Metal Head Spools 4¼" T. x 3¾" H.
27M All Metal Spools—5" T. x 3" H.
6M Bakelite SB Spools—5" T. x 3" H.
1500 Mak. Sizing Tubes 7" Long x 6⅛" Dia.
100M Fibre Winder Spools 3¾" T. x 3" H.
12M Take Ups—3¾" T. x 3¼" H. S.S.
60M SB Spin. Spools—4¾" T. x 27/16" H.
15M Spin. Spools—4⅞" T. x 4⅜" HD. 1941.
12M Fibre Ship. Spools—5½" T. x 3" H.
2M Metal Bobbin & Cone Trays.

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7—8 x 4 Saco Lowell Slubbers, J-3 Long Draft, 6" gauge 5-152 Spindles; 2-144 Spindles.
3—12 x 6 Whitin Slubbers, conventional draft, 72 spindles each, balance carriage, 1923 Model.
1—Whitin C. O. B. Machine.
1—Whitin C Model Spooler, 6½" gauge, 120 spindles, tape drive.
10M—5 x 5½ Fibre Head Spools.
1500—12 x 36 Fibre Roving Cans.

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MACHINERY FOR SALE
EXCELLENT TEXTILE FINISHING MACHINERY

1—Worthington Duplex Steam Pump 7½ x 4½ x 10" Weight 1500 Lbs.
1—Worthington Duplex Steam Pump 7½ x 5 x 6" Weight 1200 Lbs.
3—36" diam. 52" wide between rings Copper Cans.
3—65" Steel Rolls covered with Wool Felt.
2—30" Brass Rolls ½" thick—14" diam.
34—C.I. Can Gears.
1—70" wide S.S. Box for Jigs.
7—50" wide S.S. Boxes for Jigs.
1—132 wide S.S. Section slat.
1—Simplex Tubing & Doubling Machine.
43—50" Copper Cans 23" dia.
1—Junior Size Bleaching Range Stainless Steel Throughout. Capacity 600 lbs. per Hour.
Wire—Write—Phone
TEL. UNION 1-0050

brand New, has D.C. Drive & Generator Set all G.E. Installation.
1—5 Can 52" Narrow Fabric Finishing Mchs. BB Drive—52" Quetch.

TEXTILE FINISHERS EQUIPMENT
144 WEST RIVER ST.
PROVIDENCE, R. I.

appeared to have jumped to about double their percentage of last year's over-all commitments, while knitting mills and dyeing and finishing plants seem to have spent the same proportinate shares this year as last.

The 1951 average index numbers on textile-machinery costs and industrial-building costs, compiled by Marshall & Stevens, Inc., Chicago, Ill., valuation engineers, show jumps to 187 and 229 respectively, as indicated in the chart on page 110. This 10% jump in textile-machinery costs and 7% use in mill-building costs follows fairly closely on the heels of the 10% drop in the value of the dollar during the past year.

Major Spenders

Major U. S. essentially-cotton-mill spenders or committors of funds in 1951 were Victor Monaghan, Williamston Cloth, Mayfair, Dan River, Chesnee, Utica-Mohawk, Appleton, Mills', and Kilburn.

Rayon and synthetics-type mill spenders that went over the $1,000,000 dividing line between "big" and "little" spenders include Belding Certicelli, Burlington, J. P. Stevens, Frank Ix (Sheraton), Peerless, Beaunit, and Textron.

Woolen and worsted-mill top spenders include Bigelow-Sanford, Deering-Milliken, Alexander Smith, Wyandotte Worsted, and James Lees.

Knitting-mill spenders of note include Berkshire, Burlington, Fairview, Monarch, Textron, Belton, and Elizabethton.

Dyeing and finishing plants that went ahead with improvement or expansion plans this year include Clearwater, Crompton-Shenandoah, Deering-Milliken, Utica-Mohawk, United Piece Dye, Cranston Print, Reeves Bros., and American Thread.

Record Capital Outlay For Total U. S. Business

▶ American business planned record capital outlays of $13,400,000,000 in the second half of 1951, the Office of Business Economics in the U. S. Dept. of Commerce and the Securities and Exchange Commission have estimated.

▶ Plant and equipment expenditures for U. S. business for the full year 1951 are expected to amount to $24,800,000,000 as compared with $18,600,000,000 in 1948, the previous peak year for U. S. business.

▶ Though costs of capital expansion have risen since 1948, it apears that the physical amount of U. S. plant and equipment purchased this year will be about one-sixth more than in 1948 and one-fourth more than last year.

DYEING & FINISHING

2—Van Vlaanderen Stainless Steel Tensionless Dye Jiggs, 50"
1—Van Vlaanderen Palmer Quetch Unit 64" wide
3—Copper jacketed Mixing Kettles, 50 & 100 gallons
2—Textile Agers 20' and 30', 50" and 72" wide
1—Phila. Loop Dryer, 35' long, 83" width, revolving sticks
1—Cottage Steamer 30' long, 90" diameter
2—Greige Washers 76" width rolls, 3 compartments
27—Copper Dry Cans 76" wide x 23" dia. 3 stacks, syphon
1—Windsor & Jerauld Tenter Frame 40' long x 65" cloth width
1—Van Vaanderen Centrifugal Extractor 60", copper basket
6—Quetches, 2 & 3 roll, 50"-60" width
1—Textile Calender, 3 rolls, 1 steel, 50" wide, M.D.
1—Butterworth Tenter Frame, 90' long x 60" w/50' housing
1—Van Vlaanderen Singer, 60" wide, 2 gas burners

PRINT MACHINES

1—Rice, Barton & Fales Print Machine 12 colors, 48" wide
1—Franklin Print Machine, 9 colors, 60" wide
1—Franklin Print Machine, 9 colors, 48" wide
1—Franklin Print Machine, 8 colors, 66" wide
1—Rice, Barton & Fales Print Machine, 8 colors, 60" wide
1—Rice, Barton & Fales Print Machine, 7 colors, 45" wide
2—Rice, Barton & Fales Print Machine, 6 colors, 45" wide
1—Rice, Barton & Fales Print Machine, 5 colors, 42" wide
1—Rice, Barton & Fales Print Machine, 3 colors, 45" wide
1—Rice, Barton & Fales Print Machine, 2 colors, 45" wide

SPINNING

2—S-L Single Process Pickers, auto. feeders
2—Butterworth Rag Pickers, 17" w/apron
4—S-L Kitson Feeder Hoppers, 38"
45—Mason Cards, 40" 27" doffer, 100-110, 12" coiler
22—Dobson & Barlow Cards, 40", 24" doffer, strippers
5—Intersecting Gill Boxes, 2 head
2—Whitin Sliver Lappers, 20 end, 9¾" spool
2—Whitin Ribbon Lappers, 4 lap, 11¾" spool
12—Whitin Drawing, 6 del. Model H, 16" gauge
5—S-L 7/3½ Slubbers, 160 spdl. 5¼" ga, J-2 L.D.
4—S-P 9x4½ Slubbers, 100 spdl. 7½" ga, J-1 L.D.
28—S-P 11x5½ Slubbers, 64 spdl. 9½" ga. Casablanca, L.D.
11—Whitin Spinning Frames, 252 spdl. 3¼" ga. Casablanca, L.D.
17—Universal #50 Winders, L drive, cone belt gain
3—Collins Twisters, 154 spdl. 4½" ga, tape drive
3—Collins Twisters, 84 spdl. 5½" ga, band drive
3—Abbott Quillers, Model 64, 70 and 80 spdls.

LOOMS

300—Draper XD, 44" cloth, 20 harness dobby, ape 1941, M.D.
12—Axminster 9' Carpet looms, M.D.
100—Draper Modified D duck looms, 60", belt
200—Crompton & Knowles "Cotton King", 4x1 auto. 45½" r.s. MD
100—Draper XK, 44" cloth, 20 harness dobby, M.D.
40—Draper Model E, 60" cloth, 16 harness dobby
93—Crompton & Knowles Model 5S, 56" r.s. 2x1 box, 20 harness
76—Draper Model K, 48" cloth, 20 harness dobby

COMPLETE MILLS

Cotton Yarn Spinning Mill, 20,000 Long Draft spindles
Modern Rayon Weaving Mill, 5-6 looms, Hi Speed Warpers
Complete Dyeing, Finishing & Printing Plant

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AVAILABLE IMMEDIATELY

Item L-WC

NEW WASHING & CARBONIZING UNIT

James Hunter—Complete
Continuous-Working Width 90"
Includes Dryer, Scutcher,
Squeeze Rolls, Etc.
Still in original crates

Item B-HJ

5—Thomas Halton Jacquard Heads

600 Hook—Double 300
9" Lift
Would include Crank Lever Stand, and
Side Pump Lever
But No Lingoes or Harness

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10 BALL WARPERS

Making Standard 36" Ball Warp
— With —
10—300 End Creels—Single End
Taking Standard 6" Cone

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152—C & K, 2 x 1, S-3 automatic shuttle changing motorized looms, weave 50" and 52" cloth. Complete.
112—C & K, 2 x 1, S-5 automatic bobbin changing motorized looms, weave 32" cloth. Complete.
24—C & K, S-6 2 x 1, 58" motorized automatic bobbin changing looms. New.
32—C & K, 2 x 1, automatic bobbin changing looms, weave 50" cloth complete. Motorized.
22—C & K, 4 x 4, 68" Intermediate gem head motorized looms complete weave 64" cloth.
16—C & K, 4 x 4, 72" intermediate gem head motorized looms weave 68" cloth.
76—Atwood (Monarch type) 184 spindle double deck spinners, motorized.
70—Draper Model C automatic shuttle changing looms, motorized, weave 48" cloth.
3—Johnson 5 can 68" slasher complete, silk system.
2—Van Vlaanderen 5 can 60" Slashers, silk system, complete.
2—Cocker 60" 5 can slashers, cotton system, complete.
1—Johnson 60" 5 can Slasher complete, cotton system.
1—2 cylinder 20" x 60" Smith & Furbish Garnett machine, equipped with speed reducer, excellent condition.

Complete line of Universal #90 Quill Winders, #50 Cone Winders.

Large assortment, stainless steel, steam jacketed kettles, 40, 60, 80 and 100 gallon capacity complete with lids, stands, safety and drain valves.

New looms parts and supplies, harness frames, heddles, bobbins, etc.

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7—Readings, 45 gauge, 20 section, single needle bar, high speed, 11,000 serial range. Lot No. 2227b.
6—Readings, 45 gauge, 24 section, single needle bar serial range 10,000. Lot No. 2227b.

MORRIS SPEIZMAN CO., Inc.
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S&K Where your $$$$ buy MORE

94 Draper Auto. Model E Dobby Looms, Motor Driven, 43" cloth.

50 C & K S-3 Looms 54" R.S.

40 FOSTER CONERS MODEL 75A

50 C & K 2x1 52" R. S.
16 C & K 2x1 Automatic 72" R. S.
6 C & K 4x4 72" R. S.
56 C & K 4x1 56" R. S.
4 C & K 110" R. S. 4x4
2 C & K 100" R. S. 4x4
12 C & K 92" R. S. 4x1 Automatic
18 C & K 4x1 Automatic 82" R.S.
5 C & K 4x4 82" R.S.

DYEING MACHINERY
1 40" Hinnikens 60" frame with Gas Burners, reeves & motor
6 60" Hinnikens Jiggs all stainless steel
1 Paterson Examinor, 72" wide
1 72" Park Woolson Decater
1 Set 18 Dry Cans 48" face; 5 stainless steel, 13 iron tinned with reeves
8 Dry Boxes S.S. lined 8'—10'—12'
1 Jentrom fabric conditioner 64"
1 14 can Butterworth dryer 142"
1 19 can Butterworth dryer 72"
1 Textile Tenter Frame 52" wide 40' long
4 Three (3) Roll Padders 45"
30 50" Dry Cans
1 Birch Bros. Scutcher & Vacuum 60"

SILK THROWING MACHINERY
5 Atwood 58 Twisters
9 Atwood Single Deck Utility Spinners
30 Universal Coners #50
8 Sipp Warpers & Winders
20 #90 Universals
4 Oswald-Grundy 46—Spindle Cop Winders

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1—Tolhurst 60" Copper Basket Centrifugal, center slung, 10 H.P., 3/60/440 volt motor. Rebuilt:
1—Complete Permutit Water Softening Plant 36,000 gal. per hour;
1—750 Kva Unaflow Engine Generator Set, 3/60/2300V., exciter, switchboard;
1—Murray 510 H.P. W.T. Boiler, ASME. Built for 225# pressure, Automatic Controls.

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2—9 ft Crompton & Knowles Jacquard Wilton & Brussell looms. Motor driven.

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FOR SALE!

10—Flat Knitters, 40" fabric
1—Flat Knitter, 87" fabric
1—Curtis & Marble 68" Cloth Tuber
1—Barber-Colman Model "E" Knot Tyer
1—Textile 50" 3-Roll Padder
1—3 Ton Cloth Pressure Kier
1—Textile 50" 2-Roll Mangle
4—SS lined 48" Dye Jigs

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TRICOT MACHINES

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6 Saupe 168 inch tricot machines
Rebuilt; excellent condition. Reasonably priced

FS-2268, Textile World
330 W. 42 St., New York 18, N. Y.

News of the Month

(Continued from page 294)

devoted to specialized subjects of interest to particular industries.

General topics include: "Introduction" and "Maintenance Costs" on the first day; "Inspection Methods and Records for Preventive Maintenance" and "Planning and Scheduling Maintenance Work" on the second day, and "Training Maintenance Workers and Supervisors" and "Lubrication" on the third.

On the last day of the conference, 16 round-table groups will meet. One of these round-table groups will specifically discuss maintenance in textile mills. At the show, 200 companies will display products and services necessary for maintenance. Both conference sessions and exhibits will place the principal stress on preventive maintenance.

Advance registration cards and hotel information can be obtained from Clapp & Poliak, Inc., 341 Madison Ave., New York 17, N. Y.

Mobilization News Items

CPR-22 Cost Amendment. In an amendment to CPR-22, applying to finishers, dyers, throwsters, and converters, OPS has added yarns and fabrics made from natural or synthetic fiber or filament to the list of manufacturing materials for which the change in net cost may be calculated up to last March 15. Previously the cut-off date for these manufacturing materials was Dec. 31, 1950.

Transferred-Materials Costing. Amendments to CPR-22 (general manufacturers order) and CPR-30 (machinery order) modify a previous provision regarding cost of materials transferred from one plant of a manufacturer to another. Changed are sections of the regulations telling how to figure the change in net cost of a manufacturing material produced in one plant of a company and transferred to another plant of the same company. Integrated manufacturers can now apply for an integrated appropriate-cost increase factor to use in calculating their new ceiling prices.

On Obtaining of Chemicals. Only defense ratings issued to the Department of Defense and the Atomic Energy Commission can now be used for the acquiring of chemicals by American industry. All other users of chemicals must buy them now through normal market procedure. The only exception is a DO-Z-1 rated issued by NPA itself to an essential user of chemicals who is unable to fill his needs in the open market or find an adequate substitute.

2 Johnson 7 DRUM 52" SLASHERS

Motorized, excellent condition, silk system. Brown instrument panels. Machines set up for narrow fabric operation, but can be converted to broad goods system.

70 UNIVERSAL No. 50 CONERS

Gear gain, motorized, anti-wear tensions—3-30 Tapir cones—excellent condition.

100 C & K AUTOMATIC S-3 **LOOMS**

Large shuttle boxes—52" looms, 2 x 1—20 harness—32" & 24" flange beams—Payne let-offs—individually motorized.

LIQUIDATING **COMPLETE** NARROW FABRIC **PLANT**

- 15' 8" Fletcher Looms
- Warping equipment
- Quiller heads

6 Large Package **5-B** ATWOOD **DOUBLERS**

12 oz. package—84 spindles
1938 model—6" spacing

Complete Operating WEAVING UNIT

150 C & K LOOMS

54"—motor drive—dobby head—all auxiliary equipment—quillers—winders—warpers. Detailed information upon request.

10 FLETCHER AND SCRANTON **REELING MACHINES** AUTOMATIC STOPS & FLYS—MOTORIZED YARDAGE CLOCKS

6 U. S. Textile ACME D. DECK TWISTERS

212 spindles ea.—2 motors—1935 model—½ lb. package—4½" spindle spacing—bebbin equipment—excellent condition.

37 Atwood Twisters

Double deck—4¼" gauge

20—192 spindles
14—282 spindles
3—256 spindles

1000 TRICOT BEAMS- 13¾" HEAD—13" TRAVERSE 2¼" BORE—9/16" & ¼" KEYWAY

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EXPERTLY RE-WOUND AT A REAL SAVING

SOLD IN GOOD USED CONDITION

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LIQUIDATING—For Immediate Removal

1—Tolhurst 48" Extractor, Stainless Basket, 1949 model.
1—V.V. Palmer Quetch Unit, complete for 60" width goods.
1—R.B.&F., 2 color, 45" Print Machine, with 12-50" x 23" copper Cans.
1—P.&S. 50" Air Impinge Roller Dryer, 350°F. Temp., 18' long.

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Repeaters. Lacers. Card Cutters. Jacquards of all description. Steel Heddles & Lingoes. Quilling Machines No. 10.

EUGENE SECKLER
96 No. 7 St., Paterson, N. J.

FOR SALE—NEW

108" Diameter by 312" Long Horizontal Storage Water Heater with steel shell ¾" thick and bumped heads ⅞" thick, welded construction. Storage capacity 11,900 gallons. Heating capacity 6000 gals. of water per hour from 40° to 180° F. with steam at 100# pressure.

Total weight approximately 16 ton.

Never been in use. Available for immediate shipment.

FS-2012, Textile World
330 W. 42 St., New York 18, N. Y.

A&M BLANK CO., INC. OFFERS FOR

IMMEDIATE DELIVERY

1—V. V. Palmer Quetch Unit 64" with Compensator
1—Palmer 54" x 60" Dia. complete with Blanket $2750.00
1—8-Fan National Loop Dryer, revolving Sticks $4500.00
1—50" x 60' Tenter Frame, S. S. Clips, P.S. Housing $3000.00
1—72" x 70' 5-Tier Pin Dryer, 10 passes automatic opener $4500.00
1—60" Floating Knife Coater $350.00
1—50" Single Color Print Machine $750.00
1—50" 2-Roll Morrison Padder $375.00
1—50" Morrison Button Breaker, Ball Bearing $400.00
1—Set 16 Copper Dry Cans 80" $1200.00
4—Dinamore Bicycle Sewing Machines $50.00 each
1—Giant Mixer $200.00
1—60" E. & H. Flat Folder $300.00
1—48" Hermas Inspection & Measuring Machine $200.00
Reaves Transmissions #2—$150.00 #3—$200.00 #4—$250.00

Remember the full name—for full value—

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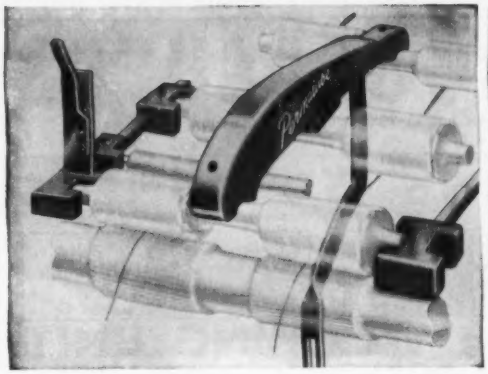

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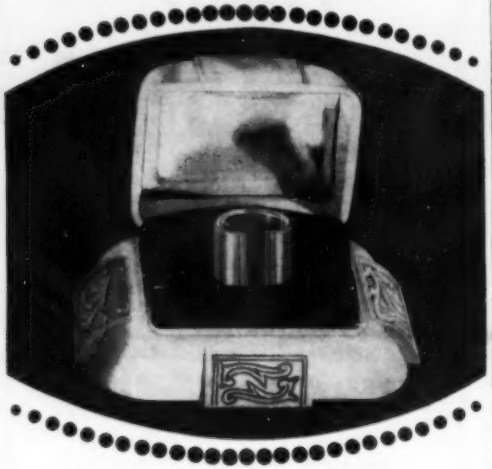

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TEXTILE WORLD

NOVEMBER, 1951

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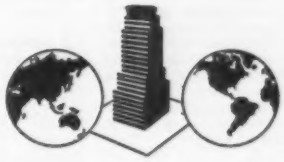

▸ Brief Summaries in Spanish, French, and German of the Major Feature Articles in This Month's Issue

Español

Este número de Noviembre contiene una revista del nuevo equipo textilero que ha sido ofrecido durante el pasado año en el mercado americano. Las descripciones a continuación son de algunos de los equipos más importantes que han estado disponible desde hace un año.

Página 114

Estiradores de Peines Erizo de Gran Estiraje. Un nuevo dispositivo Superdraft para estiradores de peines erizo, desarrollado en Italia, permite estiraje hasta de 8 con fibra corta y hasta de 10 con fibra larga. Es posible, por lo tanto, eliminar uno o dos pasadas del estiraje. El nuevo dispositivo tiene un tablero para llevar la cinta de los cilindros de entrada a los peines erizo, en su punto más cercano. Se reclaman velocidades hasta de 31 yardas por minuto. Un solo operario puede manejar una máquina de 50 bobinas.

Página 115

Báscula Mecánica para Napa se Mueve a lo Largo de la Línea de Batán. La Toledo Scale Co., de Toledo 12, Ohio, ha introducido una nueva báscula de autoaccionamiento para tela de batán que se mueve a lo largo de la línea de batanes sobre un carril. La báscula puede ser regulada ya sea desde los batanes o del carro del a báscula. El aparato imprime también el peso de la tela de batán.

Página 115

El Tejido al Azar Ofrece Posibilidades de Utilizar los Desperdicios. Una versión perfeccionada del Rando-Webber, una máquina para producir tejidos al azar o sin orientación, ha sido anunciada por la Textile Div., Curlator Corp., de Rochester, N. Y. El tejido producido es adaptable para elaboración de fieltro, huata, esteras, o tejido de fibra a mano sobre una base continua. Se producen tejidos que pesan de ½ onza a 8 onzas por yarda cuadrada en anchuras de 40 pulgadas a 35 libras por hora. Una nueva unidad de alimentación asegura la uniformidad del tejido producido.

Página 115

Nuevo Abridor de Algodón. La Thornbury Machine Works de Dallas, N. C., ha desarrollado una nueva máquina para abrir y limpiar algodón, exenta de corriente de aire, que utiliza fuerza mecánica y centrífuga. Los calentadores giratorios abren y hacen pasar el material por 225 barras de rejilla ajustables, vibratorias y que no se atascan. La gravedad y la fuerza centrífuga hacen la limpieza. El abridor,

Français

Ce numéro de novembre passe en revue le nouveau matériel textile qui a paru sur le marché au cours des douze derniers mois. Nous vous donnons donc ci-après une description de nombreuses machines et appareils ayant un mérite spécial.

Page 114

Grand étirage sur métier à hérissons. Un nouveau système de grand étirage sur étireuses à hérissons, permettant des étirages de huit pour des fibres courtes et de dix pour des fibres longues. Un ou deux passages peuvent par conséquent être supprimés. Le nouveau dispositif a un manchon qui conduit le ruban des cylindres arrières au point le plus rapproché des hérissons. On déclare qu'une vitesse de 31 yards par minute peut être atteinte. Un ouvrier peut s'occuper de 50 bobines.

Page 115

Balances pour nappes d'ouvreuses batteuses, qui se déplacent. La Toledo Scale Company, Toledo 12, Ohio, vient de mettre sur le marché une balance à peser les nappes de batteuses, qui se déplace sur rails, d'une batteuse à l'autre. L'appel et le déplacement de la balance peuvent se faire automatiquement, des signaux pouvant être emis soit des batteuses soit sur les balances elles-mêmes.

Page 115

Une machine produisant un ruban de fibres entrelacées au hasard offre des possibilités pour l'emploi de déchets. Un modèle perfectionné du "Rando-Webber," une machine qui produit des rubans de fibres entrelacées au hasard, vient d'être annoncé par la division textile de la Curlator Corporation de Rochester, N. Y. Ce ruban convient pour la fabrication de produits feutrés et de nappes produites en rubans continus. Leur densité est variable, allant d'une demi once à huit onces par yard carré et leur largeur est de 40 pouces. La production horaire est de 35 livres. Un nouveau système d'alimentation assure un produit uniforme.

Page 115

Nouvelle ouvreuse pour coton. La firme Thornbury Machine Works de Dallas, N. C., a mis sur le marché une nouvelle ouvreuse – nettoyeuse pour coton dont l'action est basée sur des forces mécaniques et centrifuges, sans emploi de courants d'air. Des batteurs rotatifs passent le coton sur 225 barres vibrantes, qui peuvent être réglées et qui ne se bourrent pas. Le nettoyage se fait par les effets

Deutsch

Diese November-Ausgabe enthaelt eine Uebersicht der neuen Textilvorrichtungen, die waehrend des letzten Jahres auf den amerikanischen Markt gekommen sind. Die folgenden Beschreibungen sind ueber einige der wichtigsten Maschinen, die seit einem Jahr zu haben sind.

Seite 114

Langverzug-Nadelwalzenstreckmaschinen. Eine neue Hochverzugsvorrichtung fuer Nadelwalzenstreckmaschinen, die in Italien herausgebracht wurde, gestattet Verzuege bis 8 fuer Fasern mit kurzem Stapel und bis 10 fuer laengere Fasern. Es besteht die Moeglichkeit ein oder zwei Passagen des Streckens zu uebergehen. Die neue Vorrichtung hat ine Hose, um das Faserband von den rueckwaertigen Walzen zum naechstbefindlichsten Punkt der Nadalwalze zuzufuehren. Es wurden Geschwindigkeiten bis zu 31 yards per Minute beobachtet. Ein Arbeiter kann eine 50 Spindelmaschine bedienen.

Seite 115

Eine durch Kraft angetriebene Wickelwage bewegt sich laengst der Pickeranlage. Eine neue, sich durch Eigenkraft bewegende Pickerwickelwage, die auf einer Schiene laengst der Pickeranlage laeuft, wurde von der Toledo Scale Co., Toledo 12, Ohio, auf den Markt gebracht. Die Wage kann entweder vom Picker oder der Wage selbst aus kontrolliert werden. Die Wage druckt auch das Gewicht auf den Wickel.

Seite 115

Maschine fuer vielartigen Faservflor ergeoeffnet Moeglichkeiten fuer Abfallnebenprodukte. Eine verbesserte Art des Rando-Webber, einer Maschine zur Erzeugung von Faservflor fuer unbestimmte Zwecke, wurde von der Textilabteilung der Curlator Corp., Rochester, N. Y., angekuendigt. Der erzeugte Flor ist fuer die Verarbeitung zu Filz, Abfallwatte, Matten oder fuer hand-aufgelegte Faservvliese auf fortlaufender Grundlage verwendbar. 35 Pfund per Stunde werden von ½ oz bis zu 8 ounces per Quadratyard wiegenden Flor in 40 Zoll Breite erzeugt. Ein neuer Zufuhrapparat sichert Gleichfoermigkeit des erzeugten Flores zu.

Seite 115

Neuer Baumwolloeffner. Eine Reinigungs- und Oeffnungsmaschine, frei von Luftzug, die mechanische und Zentrifugalkraft an Baumwollballen und anderen Fasern verwendet, wurde von den Thornbury Ma-

que pesa alrededor de una tonelada, tiene 9 pies 4 pulgadas de longitud, 8 pies 5 pulgadas de altura y 4 pies 4 pulgadas de anchura.

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Transmisión Electro-Magnética Desenreda el Hilo. Una nueva transmisión de bobinadora capaz de tirar de las marañas y enredos de los hilos sin ejercer más de la tensión determinada con antelación, ha sido desarrollada por la Eaton Mfg. Co., de Cleveland, Ohio. La transmisión es útil al embobinar de los rodetes para reducir el desperdicio dejado en ellos.

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Nuevo Aditamento de Bobinadora Almacena y Coloca las Bobinas. El artículo describe un nuevo aditamento que puede aplicarse a la mayoría de las bobinadoras Foster o Universal que ha sido desarrollado por una firma de Nueva York. Con el nuevo dispositivo, las bobinas son traídas del salón de hilatura o de la máquina acondicionadora en una cubeta que corre por un riel superior. Toda la cubeta es vaciada haciéndola inclinar. Una gran tolva superior proporciona espacio suficiente para almacenamiento. Después de llenarse en la bobinadora, los carretes o conos son colocados en un transportador sin fin y son llevados a la tolva de conos o a la mesa de inspección.

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La Tensión Remueve la Suciedad del Hilo. Un nuevo tipo de tensión de peso muerto de auto-limpieza, indicado principalmente para usarse en la elaboración de hilos "sucios" hechos de algodón de clase baja, ha sido desarrollado por la Muschamp Taylor Ltd., de Manchester, Inglaterra. La tensión contiene una rueda de rotación libre en la cual hay cortadas tres ranuras. Las semillas caen a través de estas ranuras separándose del hilo.

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Aditamento Más Corto de Cadena de Maquinita. La North Carolina Vocational Textile School, de Belmont, N. C., ha desarrollado un nuevo aditamento de maquinita que permite acortar la cadena para el dibujo de la maquinita para obtener diseños complicados. En muchos casos, una cadena corta con menos de treinta barras puede ser usada para reemplazar una cadena de varios cientos de barras. Un trinquete de leva y palancas controlan el movimiento del cilindro de la cadena de dibujo, el cual puede hacerse girar con movimiento de avance o intermitente, hacerse oscilar, o pararse en la secuencia conveniente para producir un dibujo largo y complicado en la tela. El dispositivo no obstaculiza los otros movimientos del telar.

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Aditamento que Produce Efectos de Jacquard. Ha sido desarrollado un aditamento de maquinita de cilindro múltiple para producir frazadas y sábanas eléctricas. El aparato puede usarse también para frazadas de bordes de fantasía, manteles, tohallas de borde cruzado, etc., en las cuales ocurren a grandes intervalos varios tejidos básicos o combinaciones de ellos. El aditamento está indicado para reemplazar el costoso cabezal jacquard que se utiliza actualmente para este tipo de producción.

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Nuevo Aditamento Teje Telas Compactas. Ha sido desarrollado un aditamento mejorado para telar para tejer géneros de algodón extra compactos que son naturalmente impermeables. El dispositivo está basado en el principio de producir más

Page 116

Un entraînement électro-magnétique dégageant les anchevêtrements de fils. Un nouveau bobinoir capable de dégager progressivement les enchevêtrements de fils a été créé par la Eaton Manufacturing Company de Cleveland, Ohio. Cet appareil peut se régler de façon qu'une tension qui a été determinée d'avance ne soit pas dépassée. Un entraînement de ce genre est particulièrement utile pour le bobinage de gâteaux de rayonne ou matières similaires et permet dans ce cas de réduire le pourcentage de déchets.

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Un nouvel appareil pour bobinoirs emmagasine les fuseaux (bobines) et les met en position. Ce nouvel appareil a été créé par une firme de New York et peut se monter sur la plupart des bobinoirs Foster ou Universal. Dans ce système les bobines venant de la salle de filature ou du conditionnement respectivement de l'appareil d'humidification sont chargées dans un bac du mono-rail placé au-dessus du bobinoir. Ce bac se renverse lorsqu'il arrive au-dessus d'un réservoir d'alimentation d'ample dimension. Lorsque les cônes ou bobines sont pleins une toile sans fin les conduit à la réserve ou à la table d'inspection.

Page 119

Dispositif de tension et de nettoyage pour bobinoirs. La firme Muschamp Taylor Ltd. a mis au point un dispositif de tension qui nettoye en même temps les fils. L'appareil a été conçu particulièrement pour traiter des filés faits de cotons inférieurs et considérés comme "sales." La tension consiste en une roue tournant librement et munie de trois rainures à travers lesquelles tombent les duvets, particules de graines, etc.

Page 120

Chaînes plus courtes pour mécaniques armures. Un nouveau dispositif pour mécaniques armures vient d'être créé à l'Ecole Professionnelle Textile de la Caroline du Nord (North Carolina Vocational Textile School) à Belmont, N. C. Dans bien des cas le système permet de remplacer les anciennes chaînes de plusieurs centaines de barres par une nouvelle chaîne de moins de trente barres. Une roue à cliquet commande le cylindre de la chaîne, étant commandée par came et levier. Elle tourne dans les deux sens ou s'arrête au besoin permettant de produire des dessins compliqués. Ce système n'entrave pas les autres mouvements du métier.

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Dispositif permettant de produire des effets Jacquard. Une mécanique à armures à plusieurs cylindres vient d'être créée pour tisser des couvertures et des draps chauffés au moyen de résistances électriques. Le dispositif trouve également son emploi pour tisser des couvertures ayant des bordures de fantaisie, du linge de table et des essuie-mains à bandes transversales de fantaisie où le motif est produit par la combinaison de différents effets se répétant à grands intervalles. On peut de la sorte se passer d'appareils Jacquard onéreux.

Page 121

D'un nouveau dispositif qui permet un tissage très serré. Un nouveau dispositif perfectionné vient d'être créé qui permet de tisser suffisamment serré pour rendre, de ce fait seul, des tissus de coton imper-

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Elektro-Magnetischer Zugantrieb bei Garnverwicklungen. Ein neuer Aufspulantrieb, welcher das Rupfen an Verwicklungen und Verkraeuselungen im Garn ermoeglicht, ohne die vorher bestimmte Spannung zu ueberschreiten, wurde von der Eaton Mfg. Co., Cleveland, Ohio, herausgebracht. Der Antrieb ist in der Abspulung von grossen Garnspulen nuetzlich und vermindert den Garnspulenabfall.

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Neuer Spulapparat lagert Spulen und bringt sie in Position. Ein Apparat wurde von einer New Yorker Firma herausgebracht, der an den meisten Foster und Universal Spulmaschinen angebracht werden kann. Mit der neuen Vorrichtung werden die Bobbinen vom Spinnsaal oder von der Konditioniermaschine in einem Eimer herangebracht, welcher oben an einer Tragschiene laeuft. Der ganze Eimer wird durch Kippen geleert. Ein grosser, oben angebrachter Kasten schafft genuegend Lagerplatz. Sobald die Spulmaschine aufgefuellt ist, werden die Bobbinen oder Kreuzspulen auf ein endloses Laufband gegeben und zu dem Spulenkasten oder Inspektionstisch befoerdert.

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Druck reinigt Schmutz vom Garn. Eine neue Art der Selbstreinigung durch Schwergewichtsspanner, vor allem fuer den Gebrauch in der Verarbeitung von "schmutzigem" Garn, erzeugt von minderwertiger Baumwolle gedacht, wurde von der Muschamp Taylor Ltd., in Manchester, England, herausgebracht. Die Spanner enthalten ein sich frei-drehendes Rad, in welchem sich drei Einschnitte befinden. Durch diese Schlitze fallen die Kerne und der losgeloeste Flug vom Garn.

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Kuerzere Kettenvorrichtung fuer Schaftmaschinen. Eine neue Schaftmaschinenvorrichtung, welche die Verkuerzung der Schaftmusterkette fuer komplizierte Webarten gestattet, wurde von der North Carolina Vocational Textile School, Belmont, N. C., ausgearbeitet. In vielen Faellen kann eine kuerzere Kette von weniger als 30 Gliedern genommen werden, um eine Kette von vielen 100 Staeben zu ersetzen. Ein Hubscheiben-Sperrhacken und Hebel kontrollieren die Bewegung des Musterkettenzylinders, welcher sich abwechselnd vorwaerts bewegt oder uebersprungen werden kann, wie ein Pendel schwingt, oder in angemessener Reihenfolge aufgehalten werden kann, um ein kompliziertes Muster im Gewebe zu erzeugen. Diese Vorrichtung stoert nicht die anderen Bewegungen der Maschine.

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Apparat erzeugt Jacquard Effekt. Ein an der Viel-Zylinder Schaftmaschine befestigter Apparat wurde fuer die Erzeugung von elektrischen Deckenund Leintuecher gebaut. Diese Vorrichtung kann auch fuer randverzierte Decken, Tischtuecher, Handtuecher, etc., verwendet werden, wo einige Grundweben oder Kombinationen von Grundweben in grossen Abstaenden vorkomme. Dieser Apparat soll die teuren Jacquard Vorrichtungen, die jetzt fuer

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"cubierta" en una tela al ejercer menor tensión en una capa de calada que en la otra, a medida que el batán trabaja. Los géneros hechos con el dispositivo son de una construcción tan densa que resisten la penetración del agua hasta un grado tal que no necesitan tratamiento alguno para impermeabilizarlos.

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Máquinas de Tejidos Abordonados. La nueva línea de máquinas tejedoras Supreme para hacer telas abordonadas tiene muchas características especiales. Entre los mejoramientos hay un nuevo ajuste de puntada; construcción sin topes; facilidad de conversión de abordonado sencillo al suizo; sincronización simplificada de las agujas del cilindro y del disco; levas individuales; y control automático del tamaño del rodillo de la tela.

Página 125

Produzca su Propio Hipoclorito para Blanquear. Una unidad electrolítica para producir sosa cáustica y hipoclorito de la sal común ha sido desarrollada por la Amroc, Inc. La unidad ocupa 3½ x 25 pies de espacio de piso. En 24 horas la unidad produce 225 lbs. de sosa cáustica pura y 200 lbs. de cloro. El aparato consiste de una célula de mercurio con desnatador, un rectificador de fuerza, tanques de salmuera y equipo de recirculación, tanque receptor del cáustico, y una torre de absorción del hipoclorito.

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Se Reclama Operación Sin Esfuerzos para Puntuadora Doble. Ha sido diseñada una nueva máquina de doble pespunte, hecha por la Union Special Machine Co., de Chicago, Ill., para producir una curva suave y simétrica de alimentación que produce avance uniforme de los materiales y costuras lisas y planas. El mecanismo regulador de la puntada tiene control por botón de empuje para cambiar el largo de la puntada. Una barra prensa más corta proporciona acción de alimentación liviana y positiva. El nuevo conjunto de tensión de control de hilo permite el ajuste desde el exterior de la máquina.

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Eliminada la Empesa por Paño Sin Fin de Caucho. Un nuevo tipo de paño sin fin para imprimir telas, que elimina la empesa convencional, ha sido desarrollado por la Dewey & Almy Chemical Co., de Cambridge 40, Mass. El paño sin fin, hecho de fibras naturales y sintéticas y de caucho sintético, ha sido probado plenamente en el campo.

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Empaque y Rotulado Mecánico de Medias. Una máquina empacadora que inserta las medias en una bolsa de celofán, dobla la bolsa, y le pega una etiqueta, es ofrecida por una firma inglesa. Las medias son alimentadas a la máquina por un operario, y se pueden colocar hasta 500 bolsas en una tolva sobre la máquina, la cual entrega pilas individuales de seis bolsas llenas. La máquina tiene 9 pies de longitud, 2 pies 9 pulgadas de anchura y 5 pies de altura.

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Micrómetro Electrónico Portátil. Se nos informa que ahora es posible medir espesores con rapidez y precisión con un micrómetro electrónico portátil desarrollado por la J. W. Dice Co., de Englewood, N. J. Los materiales textiles pueden ser medidos hasta exactitudes de 0,00002 de pulgada sin nivelación del instrumento.

méables à l'eau. Le dispositif est basé sur le principe d'alterner une tension forte de la chaîne avec une tension plus légère, au moment du battage du peigne. Il en résulte un tissu tellement dense qu'un traitement d'imperméabilisation devient superflu.

Page 123

Tricoteuse à côtes. La Supreme Knitting Machine Company a créé une série de nouveaux métiers à côtes ayant des caractéristiques spéciales. Citons entre autres: un nouveau système de réglage de la maille, un entraînement sans chiens, facilité pour passer d'une côte ordinaire à la côte suisse, ajustage simplifié du cylindre et du plateau et de leurs aiguilles, cames individuelles et contrôle automatique du rouleau d'enroulage du tricot.

Page 125

Produisez vous-même l'hypochlorite pour votre blanchiment. La firme Amroc, Inc. a mis sur le marché un groupe d'électrolyse pour la fabrication d'hypochlorite et de soude caustique, partant de sel ordinaire. Cette installation occupe 3½ x 25 pieds de surface. Elle produit 225 livres de soude caustique 100% et 200 livres de chloré par 24 heures. Le groupe est constitué par une cellule à mercure, un transformateur, des tanks pour la solution saline avec installation pour sa circulation, un tank pour caustique et une tour pour hypochlorite.

Page 128

Nouvelle machine à points de navette. La firme Union Special Machine Company de Chicago, Ill., a produit une nouvelle machine à points de navette qui se caractérise par l'aisance de l'alimentation et par la couture plate et régulière qu'elle permet d'obtenir. Le régulateur de la couture est contrôlé par un bouton-poussoir qui permet de changer le point à volonté. Le système d'alimentation a été également perfectionné et la tension de fils peut se mettre au point de l'extérieur de la machine.

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Suppression des toiles de fond (back gray) de machines à imprimer les tissus et leur remplacement par une "couverture" en caoutchouc synthétique. La firme Dewey & Almy Chemical Co. de Cambridge 40, Mass., produit une couverture pour cylindre de machine à imprimer les tissus qui remplace la toile de fond lavable (back gray) usuelle. Cette couverture faite de fibres naturelles et synthétiques ainsi que de caoutchouc synthétique a été mise au point après de longs essais.

Page 134

Marquage et emballage mécanique des bas. Un fabricant anglais a mis sur le marché une machine qui met les bas dans un sac de cellophane, plie ce sac et y applique une étiquette. Cinq cents sacs peuvent être placés à la fois dans cette machine. L'alimentation des bas est faite par une ouvrière. Le produit emballé sort en piles de six sacs. La machine occupe un espace de 9 pieds de long par 2 pieds 9 pouces de large et a une hauteur de 5 pieds.

Page 149

Micromètre électronique portatif. La firme J.W. Dice Co., qui est établie à Englewood, N. J., construit un micromètre électronique portatif qui permet de prendre bres textiles peuvent être mésurées avec précision et sans perte de temps. Des fibres textiles peuvent être mésurées avec une précision de 0.00002 de pouces sans qu'il soit necessaire de niveler l'instrument.

diese Art der Erzeugung verwendet werden, ersetzen.

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Neuer Zusatzbehelf webt besonders dichtes Fabrikat. Ein neuer Apparat, der am Webstuhl befestigt wird und es ermoeglicht ein besonders dichtes, natuerlichwasserundurchlaessiges Baumwollgewebe zu erzeugen, wurde letzthin auf den Markt gebracht. Die Vorrischtung ist auf dem Grundsatz aufgebaut, einem Fabrikat mehr "Decke" zu geben, trotz geringerer Spannung einer Weblade als der anderen waehrend des Ladenschlages. Fabrikate, die mittels dieser Vorrichtung gewoben werden, sind von derart dichter Konstruktion, dass sie das Eindringen von Wasser in solchem Grad verhindern, dass sich ein Impraegnieren eruebrigt.

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Strickmaschinen fuer gerippte Fabrikate. Die neuen "Supreme" Strickmaschinen zur Erzeugung von gerippten Fabrikaten haben viele besondere Merkmale. Unter den Verbesserungen sind neue Stichadjustierungen, Erleichterung im Uebergang von Gewoehnlichem zu Schweizer Rips, vereinfachte Synchronisierung der Scheiben- und Zylindernadeln, individuelle Hubscheiben und automatische Kontrolle der Stoffabnehmerwalze.

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Erzeugung der eigenen Hypochloritloesung fuer Bleichzwecke. Ein Apparat zur Erzeugung von Aetzsoda und Hypochlorit auf elektrischem Wege aus gewoehnlichem Salz, wurde von der Amroc Inc., herausgebracht. Es werden 3½ x 25 Fuss Bodenflaeche in Anspruch genommen. In 24 Stunden erzeugt der Apparat 225 Pfund von 100%igem Aetznatron und 200 Pfund Chlorloesung. Der Apparat besteht aus einer Quecksilberzelle mit Abzieher, einem Kraftregler, Salzloesungstank, einer Zirkulationsvorrichtung, einem Tank zur Aufnahme von Aetzstoffen und einem Hypochloritaufsaugeturm.

Seite 128

Muehelose Arbeit an Sperrstichmaschinen. Eine neue Sperrstichmaschine wurde von der Union Special Machine Co., Chicago, Ill., entworfen, um glatte symmetrische Zufuhrkurven zu erzeugen, die gleichmaessig Material zufuehren und glatte, flache Saeume gewaehrleisten. Dieser stichregelnde Mechanismus hat Tasterkontrolle, um die Stichlaenge zu aendern. Eine kuerzere Druckleiste gibt eine leichte, positive Zufuhr. Die neue Spannungszusammenstellung, welche den Faden kontrolliert, gestattet Einstellung an der Aussenseite der Maschine.

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Grauer Abdruck wird durch synthetische Gummidecke vermieden. Eine neue Auflage fuer Textildrucke, die den konventionellen grauen Abdruck ausschaltet, wurde von der Dewey & Almy Chemical Co., Cambridge 40, Mass., herausgebracht. Der Ueberzug, der aus natuerlichen und Kunstfasern und synthetischem Gummi angefertigt ist, wurde gruendlich ausprobiert.

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Struempfe werden mechanisch gepackt und bezeichnet. Eine Packmaschine, die Struempfe in ein Zellophansaeckchen gibt, den Sack umfaltet und mit einer Etikette versieht, ist von einer Britischen Firma zu haben. Die Struempfe werden in die Maschine von einem Arbeiter eingefuehrt und bis 500 Saeckchen koennen in einen Kasten an der Maschine gegeben werden. Die Maschine liefert Stoesse von 6 ge-

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Transmisión de Carda de Algodón Usa Controles y Motor de Norma. Una nueva transmisión individual de carda de algodón, proyectada de manera tal que las pesadas cargas de arranque no requieren el uso de motores especiales de alto par de torsión o controles especiales de arranque, ha sido anunciada por la American Pulley Co., de Philadelphia, Pa. Toda la transmisión está diseñada para montarse en el arco de la carda y soportarse completamente en la caja de chumacera del árbol de la carda.

Página 165

Un Cepillo Giratorio en la Barredora Limpia hasta la Pared. La Parker Sweeper Co., de Springfield, Ohio, ha añadido a sus barredoras de piso un nuevo cepillo giratorio para limpiar los pisos hasta la misma pared y para barrer las esquinas. Las barredoras son hechas en anchuras de barrido de 20 y 28 pulgadas.

Página 214

El Sistema Ambler de Superestiraje es Adaptable. El artículo describe la disponibilidad del sistema Ambler de Superestiraje, desarrollado por los ingleses, en nuevos bastidores o como unidades de conversión en continuas de hilar de anillos ya existentes. El nuevo sistema produce hilos de óptima calidad con estiraje extraordinariamente alto. El secreto del sistema Ambler es presión constante entre fibras y mantenimiento del torcido de mechas en las secciones de estiraje sin aplastarlas al pasar por la mechera. Las fibras son conservadas bajo presión en una sección rectangular entre los rodillos que no se tocan unos a otros.

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Nuevo Abridor Proporciona Algodón Más Limpio e Hilos Más Rizados. Una nueva máquina para abrir y mullir el algodón en balas, ha sido patentada por el Southern Regional Research Laboratory. La máquina usa rodillos rotativos del tipo de tomador o despepitador en lugar de batidores. Un abridor de este tipo, que elabora 2.000 lbs. de algodón por hora, ocupa un espacio de piso de 6 x 8 pies. El algodón alimentado a la máquina forma un rollo, y los dientes de la despepitadora quitan en motas el algodón del rollo. Luego un cilindro llevador de hoja metálica extrae las motas de algodón de los dientes de la despepitadora.

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Telar de Cuatro Costados. Una turbina de hilar que teje cuatro telas, cada una de 141 pulgadas de anchura, simultáneamente, es descrita en este artículo. Esta máquina francesa produce a 144 picadas por minuto en cada tela, con un total de 576 picadas por minuto. El telar puede tejer géneros que requieran hasta 16 lizos. El tamaño máximo de calada es alrededor de una pulgada, por lo que se reduce mucho el esfuerzo del urdimbre.

Página 241

Nuevo Tipo de Limpiadora al Vapor para Telares y Continuas. La Livingston Engineering Co., de Worcester, Mass., ofrece una compacta unidad de limpieza al vapor para usarse en telares y continuas de hilar. Se dice que la limpiadora al vapor requiere un tercio menos de energía que los modelos anteriores y que puede acoplarse en los lugares convenientes sin tener que añadir nuevas líneas de fuerza. La caldera, calentada eléctricamente, inyecta vapor seco a presión alta a la lanza de vapor.

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Cette commande directe pour cardes à coton ne nécessite que des moteurs et des appareils standard. L'American Pulley Co. de Philadelphie, Pa., annonce que sa nouvelle commande directe pour cardes à coton fonctionne au moyen de moteurs et d'appareils de démarrage ordinaires. Le montage se fait sur une plateforme qui supporte le palier de l'axe de la carde.

Page 165

Nouvelle brosse rotative pour planchers permet d'atteindre les murs. Parker Sweeper Company de Springfield, Ohio, fabricant de brosses à planchers, vient de créer une nouvelle brosse particulièrement utile pour bien brosser les coins et les bas des murs. Ce modèle se fait en deux largeurs: 20 et 28 pouces.

Page 214

Le nouveau système de grands étirages Ambler peut s'adapter à des métiers existants. L'article décrit l'emploi du système anglais de grands étirages Ambler pour nouveaux métiers ou son adaptation sur des métiers existants. Ce nouveau système produit un fil d'excellente qualité et un étirage considérable. Le secret de l'étirage Ambler réside en une pression constante entre fibres et dans le maintien de la torsion de la mèche dans les zones d'étirage, sans que la mèche ne soit écrasée. Le maintien de la pression se fait dans une zone rectangulaire entre cylindres qui ne se touchent pas.

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Nouvelle machine à ouvrir le coton produit une fibre plus propre et un fil plus souple. Une nouvelle machine pour ouvrir le coton en balle vient d'être brevetée par le Southern Regional Research Laboratory. Cette machine emploie des scies circulaires dans le genre de celles montées sur les égreneuses de coton au lieu des batteurs usuels. Une ouvreuse de ce genre, traitant environ 2.000 livres de coton par heure, occupe 6 x 8 pieds de surface. Le coton chargé dans la machine forme un rouleau et les dents des scies détachent de petites quantités de celui-ci; elles sont à leur tour enlevées des scies par un peigne vibratoire.

Page 226

Métier quadrangulaire. L'article décrit un métier quadrangulaire qui tisse simultanément quatre pièces de tissus, large chacune de 141 pouces. Ce métier tisse à raison de 144 duites à la minute, soit un total de 576 duites par métier. Il peut produire des tissus nécessitant jusqu'à 16 lames. La hauteur maxima de la foule est de un pouce. La chaîne ne subit par conséquent qu'un effort relativement minime.

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Nouveau système de nettoyage à vapeur pour métiers à tisser et à filer. L'appareil est construit par la firme Livingston Engineering Company à Worcester, Mass. Il est compact et sert à nettoyer les métiers à filer et à tisser. Il consomme paraît-il un tiers moins d'electricité que le modèle antérieur. Le nettoyage se fait au moyen d'une lance qui reçoit de la vapeur à haute pression fournie par une chaudière électrique. Une fiche de contact ordinaire suffit et aucune ajoute n'est à faire au système électrique. Le jet, qui est dirigé et contrôlé avec aisance, est puissant. On nettoie ainsi engrenages, cames, mécaniques armures ou toutes autres parties des métiers. Des essais ont démontré que le plus sale des métiers peut être nettoyé par un homme en 12 à 15 minutes.

fuellten Saeckchen; sie ist 9 Fuss lang, 2 Fuss 9 Zoll breit und 5 Fuss hoch.

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Tragbarer Elektro-Mikrometer. Dichtheitsmessungen koennen jetzt rasch und genau ueberall mit einem tragbaren Elektromikrometer, der von der J. M. Dice Co., in Englewood, N. J., herausgebracht wurde, gemacht werden. Textilmaterialien koennen bis zu 0.00002 Inches genau gemessen werden, ohne dass die Instrumente eingestellt werden muessen.

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Baumwollkrempelantrieb benuetzt Standard Motor und Kontrollen. Ein neuer, individueller Baumwollkrempelantrieb, der derart entworfen ist, dass die starke Startbelastung keine speziellen Hochdrehkraftmotoren oder spezielle Antriebskontrollen benoetigt, wurde von der American Pulley Co., in Philadelphia, Pa., angekuendigt. Der gesamte Antrieb ist an der Krempelseitenwand befestigt und wird vollstaendig durch die Stossfaenger an der Krempelwelle gestuetzt.

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Rotierende Buerste an der Kehrmaschine reinigt Waende. Eine neue, rotierende Buerste zur Reinigung der Boeden, Waende und Ecken, wurde der Bodenkehrmaschine hinzugefuegt, die von der Parker Sweeper Co., in Springfield, Ohio, erzeugt wird. Kehrmaschinen werden in 20 und 28 Inches Buerstenbreite erzeugt.

Seite 214

Ambler Hochverzug-System ist anpassungsfaehig. Nuetzlichkeit des in England herausgebrachten Ambler Hochverzugsystems an neuen Spinnmaschinen oder zur Umaenderung an bestehenden Spinnmaschinen jeglicher Bauart, wird beschrieben. Das neue System erzeugt Hoechstqualitaetsgarne mit aussergewoehnlich hohem Verzug. Das Geheimnis des Amblersystems besteht in dem steten Interfaserdruck und der Gleichmaessigkeit der Drehung des Faserbandes, ohne das Vorgarn platt zu druecken. Die Fasern werden unter Druck in einer rechteckigen Flaeche zwischen den Walzen gehalten, ohne einander zu beruehren.

Seite 216

Neuer Oeffner erzielt reinere Baumwolle und offeneres Garn. Eine neue Maschine, die Baumwolle oeffnet und zerpflueckt, wurde von dem Southern Regional Forschungslaboratorium patentiert. Die Maschine verwendet eine Saege-Entkoernungs oder Vorreisser-artige rotierende Walze anstatt des Klopfers. Ein Oeffner dieser Type, welche 2,000 lbs. Baumwolle per Stunde verarbeitet, beansprucht 6 x 8 Fuss Bodenflaeche. Die durch diese Maschine laufende Baumwolle formt sich zu einer Rolle, und kleine Baumwoll-Faernoppen werden durch die Saegezaehne abgenommen. Dann hebt ein Metallmesser-aehnlicher Abnehmer diese Zupfen von den Saegezaehnen ab.

Seite 226

Vierseitiger Webstuhl. Eine quadratfoermige Webturbine wird beschrieben, die gleichzeitig 4 Fabrikate bis 141 Zoll breit, webt. Die franzoesische Maschine erzeugt 144 Schuss per Minute in jedem Fabrikat, mit einer Gesamtanzahl von 576 Schuss per Minute. Der Webstuhl kann Fabrikate weben, die bis zu 16 Webgeschirre beanspruchen. Hoechste Webfachgroesse ist ca. 1 Zoll, sodass die Kettenzugspannung sehr vermindert wird.

Mc BRIDE

TEXTILE EQUIPMENT NEWS

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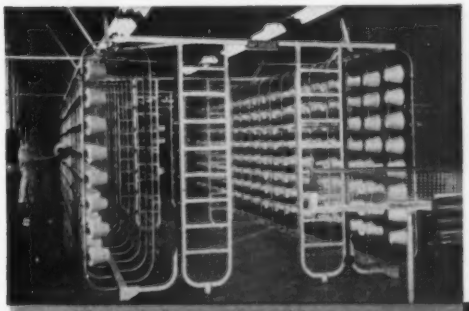
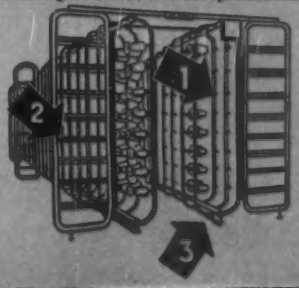


McBRIDE MAGAZINE CREELS
SPEED WARPING—CUT WARPING COSTS

The photographs on this page show typical installations of McBride SRM magazine creels. Every one of them is equipped with McBride patented Swinging Arms, Universal Cone Holders, Double Post Disc Type Tension Units (1), and McBride instant action Electro Magnetic Stop Motion (2), McBride monorail construction (3) means easy cleaning. Yet the thing most typical about these creels is their difference! Each is engineered to the needs of the user.

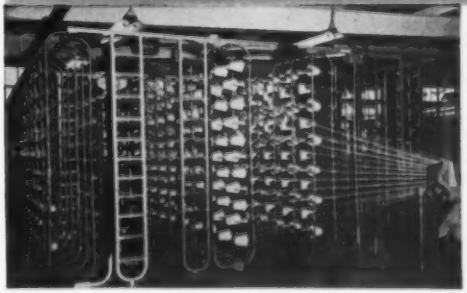
McBride Magazine Creels can be assembled for outside loading with yarn coming down the center as in the silk and rayon system, or with inside loading and yarn coming down the outside as in the cotton or wool systems.

This McBride magazine creel has given a prominent narrow fabric weaver versatility to prepare alternate nylon and cotton warps to meet government contract specifications.



Woolen and worsted ball warps are quickly prepared by this prominent eastern spinner with the aid of this McBride SRM Magazine Creel.

This creel for high speed warping of woolen and worsted pattern fabrics has cut warping costs over 30% for a prominent Pennsylvania manufacturer.



This compact tandem assembly has cut warp preparation costs by ¾ for this narrow fabric weaver.

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Every McBride Creel is engineered to the type of yarn and weave, the space available, the warping equipment and other specific requirements of the individual mill. McBride engineers work with your superintendent and plant engineers to make "on the job" layouts in your mill. This individualized engineering service is part of every McBride installation—at no extra cost to you.

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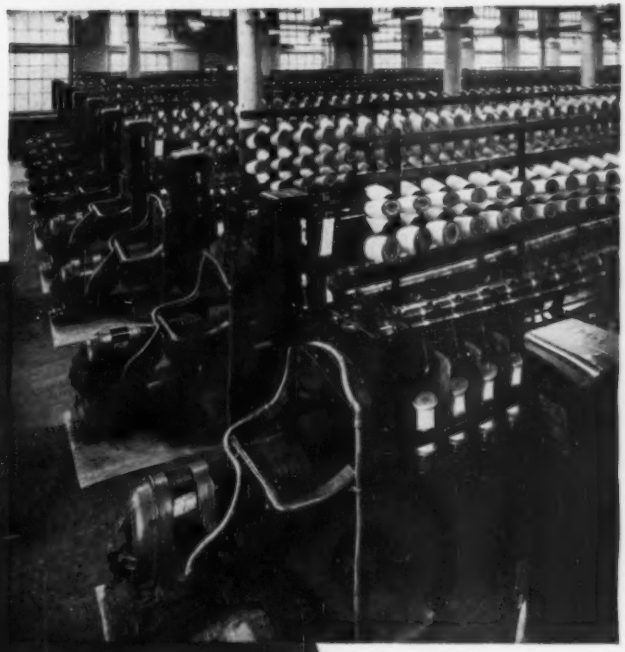

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